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THEN AND NOW IN BUSINESS

BY LEE K. FRANKEL* AND ALEXANDER FLEISHER†

IN seeking parallels between the medieval craft guild and the modern industrial unit or plant, generalizations are dangerous. Few characteristics were common to all guilds, while the history of one guild, if obtainable *in toto,* would probably reveal in succession every form of democratic or oligarchic organization. Moreover, there is much confusion of theory with fact in current descriptions of these guilds, due to the paucity of original source material so far brought to light. Realizing this it is interesting, however, to review the developments in general.

In the early history of the medieval craft guild the master craftsman invested only in tools and worked in his own home. He was a "jobber" making up the raw material given him by another, usually working alone and sometimes with the assistance of an apprentice learning the trade. His evolution as an entrepreneur, buying his own raw material and assuming the risk of sale, a change in function which had probably taken place all over Western Europe by the middle of the fourteenth century, was accompanied by a centralizing process and the congregation of more workers within one shop. This meant the formation of an employer class as distinct from the employee: The master on the one hand, and the journeyman and apprentice on the other; and for the first time in history the industrial organization can be compared with our own.

The master was one who had learned his trade and by formal procedure had been admitted as a dues-paying member of the guild, after which he had "set up" shop. The apprentice was the young worker learning the trade from a qualified master, in whose home he lived and to whom he was bound for a period of service of usually about seven years. An apprentice could not be discharged in an off season nor could he leave his master at will. The journeyman, a wage-earner, hired by day, week, or longer period, was one who had finished his term of apprenticeship and was "free" of the guild but had not the means to "set up" his own shop, or one who had served part of his apprenticeship and bought up the remainder of his term to become a journeyman until qualified for membership in the guild, or one who had picked up the craft in some other

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way but by default of apprenticeship was disqualified for full guild mastership.

Before the fifteenth century the journeymen formed a rapidly growing class who could never hope to accumulate enough money to meet the increased outlay of capital required of a master with the widening of the market. This class, more than the apprentice, resembled the modern proletariat and was the fluid labor element of the time.

The number of apprentices and journeymen a master might employ was strictly limited by guild and town statute, but sometimes a master in need of more help secretly bought over the apprentices of a less busy craftsman. Statutes imposing penalties for such action, unless expressly permitted by the guild officers, were eventually passed. It is interesting to note that this process of transferring apprentices was called "turning over" an apprentice, from which we perhaps derive our present term of labor turnover.

But in spite of the fact that the craft guild in its prime was purely an association of employers, the welfare of both journeyman and apprentice was the subject of its detailed regulation and the master was held strictly accountable for it.

Always the apprentice, and often the journeyman, lived with the master, and board, lodging, and clothing, classed together as "finding," were given in part payment. The apprentice received in addition his training and occasionally small sums of money; the journeyman, his wages. Money wages were invariably fixed by the guild and searchers or wardens made the rounds of the craft shops periodically to see to it that the boy was properly cared for and taught.

Arrangements were made for the adjustment of grievances. In Coventry in 1520, the masters of the cappers were obliged to "go once a year to all the shops of their craft and call the apprentices before them, and if the apprentice complained three times against his master for 'insufficient finding,' they had the power to take him away and put him with another master." Once the Merchant Tailors fined a master 10*s* for clothing his boy ill, "to the great disgrace of the mastery." Again the wardens of the Merchant Tailors "comutted Thomas Palmer to pryson for that he hath broke Henry Bourefelde his apprentice hede without any juste cause." A tailor of Exeter in 1482, unlawfully chastised his servant "in bruising of his arm, and broke his head," and in consequence the wardens and masters of the craft ordered him to pay his servant 5*s* for the cost of "leachcraft," 3*s* 4*d* for his board, 15*s* for "amends" and also a fine of 25*d* to the craft "for his misbehaving." We would scarcely wait today for a manufacturer's association to mete out such elementary justice, but nevertheless these regulations reveal a well-developed system for adjusting employees' grievances in medieval industry which is comparable in principle to our present grievance machinery.

Nor was the sick employee cast off by the trade. In 1355, an ordinance reads that "if any serving man (journeyman) of the said trade, who has behaved himself well and loyally towards his master whom he has served shall fall sick or be unable to help and maintain himself, he shall be found by the good folks of the said trade, until he shall have recovered and be able to help and maintain himself." Even as late as the eighteenth century when the apprentice often served on the "outdoor" system, living with his parents or otherwise independently of his master, the latter was still held

largely responsible for his illness. In 1749, in Norwich, a Thomas Church, son of Francis Church, was bound to his master with the stipulation, indicative of the novelty of the arrangement, that, "in case the said Thomas shall at any time during the said term be ill with the Small Pox, that then the said Francis Church, his Exrs and Admors, shall bear and pay to the said master one-half part of all the charge and expenses attending such illness and the cure thereof."

At times the master was called upon not only to teach the apprentice his trade but also to afford him further educational advantages. In 1462, in the case of a boy apprenticed to a haberdasher at 14 years of age for a term of 12 years, the master undertook to provide him with two years schooling, the first year and a half to learn grammar and the next half year to learn to write. In the seventeenth century provision for the education of the apprentice became more common.

Again the hours of work were fixed by the guild. The only competition between guilds of the same trade was in the quality of work produced, and for this reason work by artificial light and therefore all night work was usually prohibited. But beyond this daylight restriction were further limitations. The leather sellers, for instance (1482) set forth that work should be done only between six in the morning and six at night, while on Saturdays, vigils, and festival days, work was to cease at 3 o'clock.

The masters showed a curious regard for their employee's moral welfare. An apprentice might not dress extravagantly, wear ribbons, silver buttons, lace, or jewels. Neither could he wear long hair, nor, in the seventeenth century, a long wig. Journeymen and apprentices were forbidden to play at cards, dice, and other games. They were not allowed out after 10 o'clock at night unless on their master's business and on work-days no public house was to serve a journeyman. Frivolity was sternly repressed.

All guild members were entitled to draw from a mutual benefit fund in the case of real need. This guild chest was filled with the fees charged for the enrolment of apprentices and for obtaining the freedom of the guild, and from the periodic dues collected from masters and journeymen. Even when the journeyman lost the guild franchise and probably paid smaller dues and fees than the master, apparently the guild chest still provided him and the apprentice with relief. From this chest the wardens distributed money for burial, for the relief of poverty, sickness, old age, and unemployment, and for the support of distressed widows and orphans of the guild. Loans were made to tide members over a period of trade depression and to aid apprentices who were trying to establish themselves in business or find employment. The Carpenters of London, 1333, stipulated also that sick members should receive friendly visits from the wardens besides being given 14*d* a week. The craft guild benefit schemes seem to have been at times equivalent in scope to the most complete insurance systems devised by modern employers, the difference being that the guild funds were distributed only in case of real need and not as automatic insurance, and that the medieval employer drew from the same funds as his employee.

The real father of labor maintenance service was Robert Owen. In 1800, he took over the management, or "government" as he called it, of New Lanark, a cotton mill built in 1784, and employing some 1800 or 2000 persons including about 500 children, a "collection of the most ignorant and

destitute from all parts of Scotland, possessing the usual characteristics of poverty and ignorance." By 1812 he wrote that this same population "had now become conspicuously honest, industrious, sober, and orderly, and that an idle individual, one in liquor, or a thief, is scarcely to be seen from the beginning to the end of the year."

Robert Owen's policy was paternalistic and inquisitorial. No phase of his employee's mode of life escaped his inspection and regulation. One of his first acts was to enlarge, repair, and rebuild the houses in the village. A rule was made by which every tenant was required to clean house once a week and whitewash his home once a year at his own expense. To enforce this rule the village was divided into "neighbor divisions" and an elective committee chosen to inspect and report on the condition of the houses. He amplified the village water supply, cleansed the streets, and then policed them. Anyone found intoxicated was reported and, like the old guild masters, he allowed no one in his employ abroad after 10:30 o'clock at night without permission. In spite of preliminary opposition to his system, he gained the steadfast loyalty of his employees by paying out £7000 in wages when compelled to shut down his mills in 1807 for a period of four months because of a shortage in cotton.

Other welfare features introduced by this pioneer were voluntary company stores at which better goods could be bought than in the other stores of the village at a reduction of some 25 per cent in price. The profits from this store supported the "Institution for the Formation of Character," a school for children opened in 1816. About 380 children were taught. Any child was received as early as it could walk and the instruction given strikingly resembles the Montessori System in its dependence on the "odject method" and its encouragement of playing and dancing. The school building was used as a recreation hall for adults in the evening. A small amount of land was reserved for cultivation by the mill operatives. An asylum was built for the sick and aged, and a savings bank for employees received deposits of £3000 in 1818. In the factory no child under 10 years was given employment. In 1816 he reduced the working hours from the prevailing 14 hours a day to 12 hours with 1¼ hours off for meals, leaving a total work day of 10¾ hours. A public kitchen was planned but not completed. With it was to be combined an eating room with a gallery for an orchestra, a library, and a lecture and concert room. Dinner was to be furnished at cost price. A "Book of Character" recorded individual progress. But no one was ever discharged from the factory except for "habitual drunkenness."

Robert Owen was not alone in his pioneer welfare work. One of the most complete of the early examples of welfare work is told about in Homer's Report of 1845. An English company, employing 854 hands, supported not only a daily school for factory children and the children of their employees, but employed a surgeon at the factory daily between 12 and 1 o'clock who also made home visits and distributed hospital tickets. His salary was paid in part by contributions from the better paid employees. In 8 months this factory doctor treated 634 surgery cases and visited 53 cases in their homes. There was also a library; a brass band with an instructor (paid by the pupils); a voluntary savings bank, receiving sums of from 6*d* to 5*s* every Saturday, and paying 5 per cent interest "on undisturbed accumulations of six months"; a sick relief fund,

consisting of the fines exacted from employees, festival meetings and an annual picnic; and a fire brigade with monthly practices.

From the very start this work was found to pay. Robert Owen's unprecedented form of industrial government resulted in a profit of about £10,000 a year from 1800 to 1830, after paying £7000 in unearned wages in 1807, and the expense of benevolences. This was an average of 7½ per cent return on the £130,000 capital investment. But Owen paid a lower average weekly wage than was common in similar establishments. In triumphant vindication of the economy of his system, Owen cited, in 1816, the case of a man receiving 18*s* a week who left him to procure a guinea a week in wages in Glasgow and returned to New Lanark in a short time glad to accept 14*s* a week in an inferior position, the position he originally held having been filled.

In 1792 Dale, Owen's predecessor at New Lanark, found that though "He gave his money in shovelfuls" to his employees "God shoveled it back again." In a history of Cotton Manufacturers published in 1835, Edward Baines wrote, "I believe the conviction is strengthening and spreading that it is eminently to the interest of a manufacturer to have a moral, sober, well-informed, healthy, and comfortable body of workmen."

One English company in 1853, found itself involuntarily in the possession of a well-developed employees' school, athletic field, factory garden, and a welfare worker in the person of a factory chaplain devoting his full time to the "originating and superintending of the educational arrangements" and visiting the sick employees in their homes. The entire scheme had been fostered and paid for by the acting manager, who, by 1853, had spent from a salary of £1000 a year a sum of £3289 on the various phases of welfare work. Not until then did the directors of the company take up the matter, proposing to reimburse the manager and enable him to continue his work.

English employers' efforts to improve the condition of their employees probably did not antedate similar ones on the continent. In France the Blanzy Mining Company began building houses for their employees and charging small rents. In 1834, Messrs. Schneider and Company, proprietors of the Creusot Steel Works, established a provident fund in 1837, and between 1837 and 1899, advanced building loans to over 2000 workmen. In 1838 the Maison Leclaire, famed for its early profit-sharing system, contributed one-fourth of its profits to an employees' mutual aid society. It is interesting to note that Edme-Jean Leclair attributed his fortune of 1,200,000*fr.* to the economy of profit-sharing.

On the continent the various relief funds of the guilds and mutual benefit societies were earliest transformed into systematic insurance of employees supported in part by employers. In 1839, the Liege Mutual Insurance Fund was formed by 25 mining companies to provide, partly at the employees' expense, for accident insurance. The system extended rapidly through other Belgian mining districts. The Essen Steel Works in Germany started a sick and burial fund in 1853, and soon incorporated with it a pension fund. A fund for the relief of sickness at home was endowed in 1879, a hospital for employees in 1872, and a life insurance company in 1877. The welfare institutions of the Krupp firm have developed so rapidly that their description in 1898, filled nearly a 300, octavo-paged book, and in scope they have preceded any similar undertaking.

In the United States the Lowell Textile factories began their paternal care of the factory girls in the early thirties, with boarding-houses, company churches, company stores, and corporation schools which children under 14 years of age had to attend for three months every year. Minute rules of conduct were enforced in and out of working hours. In some cases sick funds were made up from weekly deductions of a few cents from each operative's wage. The girls were to all purposes compelled to live in the company boarding-houses, or accept the alternative of smaller wages. After deducting $1.25 a week (the price until 1836) for board, the remainder of a girl's wage was placed by the company in a savings bank. Some firms paid a physician to come once a month to the factory counting-room to vaccinate employees free of charge. Improvement circles and the operatives' magazine, *The Lowell Offering*, first proposed in 1837, originated with the girls themselves, but the other welfare features were severely paternalistic. Harriet Robinson, one of the "litterateur" of the Lowell factory girls, and contributor of *The Offering*, wrote, "Help was too valuable to be ill treated."

But the glowing colors in which Lucy Larcom, Harriet Robinson, and other factory girls, painted their "alma mater" were probably exaggerated. To secure operatives "a long, low, black wagon" cruised New England, whose driver was paid "a dollar a head" for each recruit "and more in proportion to the distance," so that girls were brought from too far away to enable an easy return home—so alleged *The Cabotville Chronicle*, in 1846. It further claimed that conditions of work and wages were misrepresented to make it appear that Lowell factory girls "could dress in silks and spend half their time reading."

The welfare work at Lowell was not so much the result of farsighted economy or of democratic sympathies on the part of the employer but rather of the necessity for attracting workers. Lowell employers seem to have shown no great anxiety to keep their workers after securing them and their "welfare work" was in no way comparable to that existent in England or on the continent.

There is little doubt, however, that in the thirties at least factory hands in this country were not treated as they were for the most part in England and that a resident of Walden, New York, was not drawing entirely on his partisan imagination when he wrote to *Nile's Register*, a protectionist paper, in 1827, that: "It has become quite fashionable in this part of the country to seek the comfort and well-being of the people employed in manufacturing establishments." He concluded his letter: "Sir, a well regulated manufacturing establishment in this country is a real boarding school for young women between the ages of 12 and 20, taken as they are from the poor and less productive class, and from solitary kitchen service; and since the introduction of the power loom they compose a large proportion of the persons employed."

So in the medieval industrial society employers provided for the welfare of their employees. Though the status of master and workman was different, their workplace was the same and their common interests apparent. While the so-called industrial revolution has everywhere carried in its wake a nominal democracy, the loss of contact between employer and employee has contributed to that disparity of interest between them which limits the effectiveness of modern industrial organization.

THE PRESENT RAILROAD SITUATION UNDER THE TRANSPORTATION ACT OF 1920

BY JULIUS H. PARMELEE*

HUMAN history is recorded as a series of movements, some of which, evolutionary in character, have progressed by slow development. Others, revolutionary in their nature, have proceeded both violently and with speed. Scientists tell us that the process of natural evolution is carried on so gradually as to appear sometimes stationary, while at times there are lapses in the process which make the movement appear retrogressive. Revolutionary movements, on the other hand, are quickly discernible, although the final result may not be recognized for generations. By "revolutionary" I mean a sudden and radical change in fundamental policy, a reversal and overthrow of established régime, not a movement accompanied by bloodshed and turmoil.

The Transportation Act of 1920 marked a distinct stage in our economic history. It, therefore, partakes of the characteristics of any stage in human history. It contains elements of both evolution and revolution. We, who stand close to its workings, may not fully discern its evolutionary characteristics. On the other hand, while its revolutionary characteristics are easily perceived, their complete and final effects may not be disclosed for years to come.

In its evolutionary aspect, the Transportation Act granted to the Interstate Commerce Commission control over the issue of railway securities; gave the Commission authority to approve or disapprove proposed railway extensions, and proposed abandonment of existing lines; placed the Commission in control of many features of railway operation, such as the supply of equipment and the unification of terminal operations; and finally, gave the Commission power to lay down the lines along which future consolidation of railway properties, either through lease or through merger, may take place.

All these important provisions in the act, and many others of less importance, may be classed as the culmination of legislative regulation already foreshadowed in previous enactments. To the extent that they represent the fulfilment of a general policy of regulation which had been but dimly outlined in the mind of the Congress, they can be judged only from the broad viewpoint of public policy. To the extent that they represent a stage in the process of evolution in railway legislation, the wisdom of putting these provisions into effect cannot be fully gauged at the present time, for the development of public policy is itself a constant process of evolution. This, it seems to me, is a fundamental factor in the present railway situation.

In its revolutionary aspect, the Transportation Act contains two important provisions, each closely related to the other: In the first place, Congress inaugurated a new public policy as to labor, when it placed the whole field of railway wages and working conditions under public supervision. Although this policy had been indicated to some slight degree in previous legislation, this final step in the process must be regarded as a new and

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untried venture. It was a bold and revolutionary stroke. By this one stroke three-fifths of the operating expenses of the railways were placed under almost complete government control.

In the second place, and to a certain extent corollary to the establishment of a large measure of public control over railway expenses, Congress deemed it wise to establish a new principle of rate-making. The rate-making powers exercised by the Congress through its agent, the Interstate Commerce Commission, represent a control by the public over the revenues of the railways, and in that sense are complementary to public supervision over railway expenses. The Congress properly recognized that control over expenses carried with it a grave responsibility on the part of the public to see that railway revenues were adequate to meet those expenses, and to provide in addition a net income which should place the railway industry on a strictly economic, that is, self-sustaining, basis. This recognition, written into our public policy, that the financial aspects of the railway industry are the same as the financial aspects of any private industry and that the same economic laws are operative, while nothing more than the application of common sense to a basic economic problem, was little short of revolutionary.

Under the Transportation Act, therefore, adequate net income has become the measure or standard according to which the level of transportation rates shall be fixed, while the long-established but indefinite policy of rate-making, by which the only test applied was the rule of reason, was discarded. The vital significance of this fundamental change in our method of fixing transportation rates can hardly be overemphasized.

A study of human history shows that economic movements have been slow to reveal themselves in final result. The process of evolution is at best a slowly moving and often halting process. The several steps in the process are so slight, and are spread over so long a period, that it is difficult to discover and appraise changes that are taking place. In the evolution of economic policy, as contrasted with natural evolution, there is an added factor of vital importance, namely, the pyschological factor. This may be termed the evolution of the human point of view. It is a factor which enters but slightly, if at all, in the processes of natural evolution, but plays a vital rôle in the evolution of a nation's economic structure. Sometimes called the development of public opinion, this factor exhibits itself in the progressive crystallization of a definite public policy. Not only does this apply to the public at large, but also to the railway managements and the railway personnel themselves. Slow in its movement, it is in fact the most powerful factor of all, the most difficult to analyze, and perhaps the most gradual in its stages of development.

Revolutionary movements in history have usually burst upon the world so violently, and have shaken the political and economic foundations so profoundly, that we sometimes overlook the long period that elapses before final results are fully realized. Take the French Revolution as an example. Although the violent phases of the revolution lasted but a few years, the French people were forced to undergo a cycle of political and economic changes which extended through the first republic, through the first empire, through the restoration of the monarchy, through the second republic, through the second empire, and even down to the establishment of the

present (third) republic, more than 80 years after the first blows of the revolution were struck. I do not mean to say, of course, that the nation was in revolt during the whole period of 80 years, but that the revolution set in motion a cycle of events which was not completed for nearly a century.

The Russian Revolution of 1917 has now become an accomplished fact for more than five years. At first hailed as the liberation of a great people from political serfdom, it has thus far plunged them into a bondage which is economic as well as political, a bondage infinitely worse than their former state. Who knows how long a period must elapse before the final effects of the Russian Revolution work themselves out, or how many different stages must be encountered before the Russian people secure political and economic freedom?

These are instances of political revolution, and I mention them only to indicate that any process of violent change arrives but slowly at final equilibrium. In the economic field, we have such examples as the drastic change from hand labor to the machine processes of industry in the eighteenth century, and from slave to free labor in the South 60 years ago, the problems arising from which are still in process of solution.

Let us apply these generalizations to the Transportation Act, considered as an element in the development of American economic policy. The passage of the act was our first effort to regulate industry in a responsible way, after years of irresponsible and ineffective attempts. In a sense, our whole public policy is now on trial. We have had 26 months of experience with the act, which became effective on March 1, 1920. Twenty-six months would be too short a period to afford a thorough test of any piece of legislation, even when operative under normal conditions. But the Transportation Act was not an ordinary piece of legislation. On the contrary, it represented a profound change in our policy of public regulation. Furthermore, it has never operated under normal economic conditions. These 26 months, indeed, mark a period which future historians may record as up to this time the most depressing and difficult stage in our economic history.

The act became effective almost at the peak of the period of post-war inflation. The highest point reached by the wholesale price level of commodities was in May, 1920, while the highest point for retail prices was that of June, 1920. From those months on, and down to the present, there has been an almost steady decline in prices, accompanied by, and in part the result of, a serious decline in the demand for raw materials and manufactured products. In the case of some industries, the peak of inflation was reached earlier than May or June, 1920. The break in the rubber market came in February, and was accompanied by depression throughout the whole automobile industry. The slump in farm prices began in the spring of 1920. The silk market broke in May and the cotton and wool markets a few weeks later. The sugar market went to pieces in July, and the deflation that followed was both rapid and radical. From the first of May on, there was a rising tide of cancellations of orders, on the part of merchants and manufacturers, the news of which filled the commercial and financial journals of that period. In a sense the railways were the last to feel the stress, although there were many signs that foreshadowed the coming storm. Railway traffic did not reach its peak until August, and continued at a high level until November, but there followed so

precipitous a drop that the traffic of the year 1921 as a whole represented the greatest reduction in railway business ever experienced by the railways in the course of a single year, either relatively or absolutely.

If our experience with the Transportation Act has been too short to offer definite conclusions as to its practicability, it follows that we are not yet in position to reach a final estimate. It may be helpful, however, briefly to summarize the developments under the act during these 26 months, and with particular reference to the present situation.

The workings of the act may be grouped under three principal heads:

1. Railway finances
2. Railway rates
3. Railway labor

1. *Railway Finances.* Recognizing that the six months following the period of federal control would be a transition period, Congress granted the railways a government guaranty against loss of net income. The guaranty was a matter of voluntary acceptance on the part of the carriers, and assured them a net income (with some slight exceptions) equivalent to that allowed by the government during federal control.

At the close of the guaranty period on September 1, 1920, the railways reassumed the financial burden of operation, and have been carrying it since. At the same time transportation rates were increased, while the level of wages had been raised four months previously, so that the railways started in on September 1, with a basis of revenues and of expenses which in theory was supposed to balance. But while the increased wages and the consequent increase in expenses were assured, the revenues from future traffic were uncertain.

The amount which it was estimated the railways would receive from the government in lieu of net income, during the six months of the guaranty period, represented about a 5 per cent return on their valuation, computed, of course, on an annual basis. The Interstate Commerce Commission has recently stated an amount which will make the rate of return less than 4 per cent instead of 5 per cent as has been usually estimated.

Since the first of September, 1920, the railways have been on a basis of rates which, it was expected or at least hoped, would produce a return of 6 per cent on the tentative valuation of their properties as fixed by the Interstate Commerce Commission. This provision has now been in effect for 20 months. Complete records are available for 19 of the 20 months, or through March, 1922, which show that during the four months from September 1, to December 31, 1921, the carriers as a whole earned a rate of return on their tentative valuation equivalent to 3.03 per cent when reduced to an annual basis; that during the calendar year 1921 they earned 3.26 per cent; and that during the three months from January 1, to March 31, 1922, they earned at an annual rate of 4.51 per cent. Their average annual rate over the whole 19 months has been 3.35 per cent. During the 19 months they fell $784,000,000 short of earning 6 per cent on the tentative valuation fixed by the Commission. In fact, the railways earned barely enough during this period to meet their interest and other fixed charges.

The effect on railway credit and their ability to finance need not be emphasized here. What financing the railways have been able to do has been accomplished either through the help of the government, or through the

medium of ordinary banking facilities at unusually high rates, although the situation has been improving in recent months. The railway credit situation is revealed not only in the market for new money, but also on the stock exchange, where railway stocks have shown an even greater tendency to decline than industrial stocks.

What the financial situation may be during the next few months, under the gradually tightening effect of the coal strike on industry, and under the modified levels of transportation rates and railway wages which may within the next few weeks or days be put into effect by the Interstate Commerce Commission and the Railroad Labor Board, respectively, it is difficult to foresee; but an industry that even under government guaranty earns less than 4 per cent, and during a period of more than a year and a half at the present high level of rates earns only 3⅓ per cent per year, cannot look for great improvement unless reductions in expenses can be brought about commensurate with reductions in revenues through rate cuts.

2. *Railway Rates.* I have already touched briefly upon the rate situation. During the period of federal control one general increase in freight and passenger rates was effected. Although wages and other operating costs rose rapidly throughout the whole period, the Railroad Administration followed the policy of meeting those increased costs out of the public treasury, rather than by further increases in rates. As a result, the railways were returned to their owners with a level of expenses relatively higher than their level of revenues, and this disparity was further increased by the first general wage decision of the Railroad Labor Board, which added more than $600,000,000 a year to the railway pay-roll.

By the rate decision which became effective on August 26, 1920, five days before the close of the guaranty period, the Interstate Commerce Commission endeavored to place railway revenues on such a level as would produce adequate net railway income, over and above wages and other operating expenses. The result of this endeavor I have already described, namely, inability on the part of the railways to earn more than 3⅓ per cent during the whole period since the new rates went into effect.

There have been many adjustments in rates during this period, most of which have been voluntary on the part of the carriers and the great bulk of which have been downward. These adjustments have covered a wide variety of commodities, including a 10 per cent reduction in agricultural products. In addition, the Interstate Commerce Commission directed the carriers in Western District to reduce the rates on grain, grain products, and hay by from 15 to 20 per cent. It has been estimated that the total annual freight revenue represented by these various rate adjustments approximates $200,000,000, or an average of about 5 per cent of the total rate level.

The Interstate Commerce Commission has recently held extensive hearings with respect to the general rate situation. These hearings were concluded in March, and a decision in the matter is expected daily.

In the meantime, the deflation of labor in other industries has been proceeding at a more rapid rate than in the railway industry, due to the fact that a level of wages regulated by government supervision changes more slowly than wages subject to competition in the open market. This in turn has tended to postpone rate reductions which might otherwise have been made, in sympathy with the general

deflation in the price levels of agricultural commodities and manufactured products.

3. *Railway Labor.* One of the most radical provisions of the Transportation Act was that creating a Railroad Labor Board of nine members, one-third of whom are representatives of the general public, one-third of the railway managements, and one-third of railway labor organizations. Into the keeping of this board was given a large measure of control over the level of railway wages and over the determination of railway working rules and regulations. The board has been functioning for the past two years, a most difficult transition period in the field of wages, as it has been in the field of prices and of rates, because during the whole period the high war levels of wages have been moving downward to a more normal and better balanced peace-time level.

The Railroad Labor Board has made two general adjustments in railway wages, and is now considering a third adjustment. The first decision was a general increase in railway wages, applicable to virtually all classes, and amounting to 21 per cent on the average. This increase, effective May 1, 1920, added more than $600,000,000 a year to the railway pay-roll. The second decision was a general decrease, and became effective on July 1, 1921. The average rate of decrease was about 11 per cent and reduced the railway pay-roll some $300,000,000 or $350,000,000 a year. A third adjustment is now under consideration, as a result of extended hearings recently concluded. This adjustment, which will probably be downward in direction, may apply to all classes of railway employees except train service employees.

The net result of the work of the Railroad Labor Board to date, so far as railway wages are concerned, has therefore been to add some $250,000,000 or more to the annual pay-roll of the railways.

In addition, the Labor Board has devoted much attention to the matter of working rules and regulations. It has modified some of the terms of the National Agreements, so-called, which were signed between the Director General of Railroads and a number of the labor organizations during the closing months of federal control. The Board has also amended various regulations with respect to overtime pay, hours of labor, and the like, which were not covered by the National Agreements. While important in themselves, these modifications represent a net reduction in wages of less than one per cent.

The Railroad Labor Board is still in the stage of finding itself, as it were, and ascertaining what are its functions and powers under the Transportation Act. This process must be undergone by any new governmental body, and the Interstate Commerce Commission went through it during the early years of its history. One ruling of the Labor Board, relating to the method employed by a large railway system in the election of labor representatives, has already been overturned by a federal court, and will doubtless go to the Supreme Court for final determination. Another ruling by the Board with respect to contract work by outside companies may also be tested in the courts. Other matters will undoubtedly be subjected to judicial review, before the powers of the Labor Board may be regarded as fully defined.

There are two other matters in this summary to which brief reference may be made. The first is the matter of railway consolidation, and the second the relative rate-making powers of federal and state regulatory bodies. As to consolidations, the Transporta-

tion Act directed the Interstate Commerce Commission to prepare a general plan for consolidation of the railway companies into a small number of systems. While consolidation is not compulsory, the railways will not be permitted under the act to consolidate along lines other than those laid down by the Commission. This provision of the act is not as yet in operation. The Commission has outlined a tentative plan, and preliminary hearings have been held, but further considertion will be given the question before any final plan is put into effect.

The rate-making powers of the Interstate Commerce Commission and the several state commissions have been the subject of much discussion and debate. The Supreme Court has already ruled, in two important decisions, that the Interstate Commerce Commission has broad powers of control over rates, and particularly with respect to discrimination as between interstate and intrastate rate structures. As a result of negotiations between the Interstate Commerce Commission and representatives of the several state commissions, a working agreement has been drawn, under which they will co-operate in the settlement of questions occupying debatable or middle ground. This agreement is so recent that it is not yet possible to surmise how it will work.

It will be perceived from this brief summary that our experience with the Transportation Act of 1920 has not yet been sufficiently extensive to offer a conclusive test of the effectiveness or the wisdom of its several provisions.

Let me define this statement in somewhat greater detail. The reasons for the assertion that the Transportation Act has not yet fully proved its worth on the one hand, or its ineffectiveness on the other hand, may be summed up as follows:

In the first place, I have already pointed out that any period of two years is too short to afford a fair test of any ordinary law, operating under even normal economic conditions. But the Transportation Act was not an ordinary law, and it has been working under conditions that have been distinctly abnormal. As to its unusual features, which go to the heart of the efficiency of government in its relations to industrial adjustments, that point is easily recognized and need not be emphasized.

As to the abnormal conditions since 1920, I will refer only briefly to the severe economic depression that exists today, both in the United States and abroad, and that has for months been exerting its baleful effect on all industry. The resulting deflation has gone through the prices of all commodities, including agricultural products and manufactured materials, has affected the price of labor, and has brought about severe financial and banking stress. Under such untoward conditions no new legislation could receive a fair test, and these 26 months of abnormal economic conditions have not furnished conclusive evidence as to the effectiveness of the act.

In the second place, entirely apart from the abnormal conditions, the Transportation Act has been functioning only in part with respect to certain of its provisions, and with respect to other provisions has not as yet functioned at all. I refer particularly to such provisions as relate to railway consolidation, also the provisions governing the recapture, so-called, by the government of one-half of railway earnings in excess of 6 per cent on value. With respect to this recapture provision, its failure to become fully operative thus far has been due in part to the fact that a few railway companies have earned 6 per cent, and

in part to the necessity of establishing a new set of regulations under which the provision may be enforced.

In the third place, certain provisions of the Transportation Act have been found difficult and even cumbersome to apply. This may not be due to faulty construction on the part of the law-makers, but to the necessity that follows any fundamental change in policy, the necessity of interpreting and solidifying the intent of the Congress with respect to the several provisions of the act. For example, it takes time to ascertain how and in what way the rate-making provisions are to be interpreted and carried out. It takes time to establish a body of precedent according to which rates can be equitably adjusted to current economic conditions, and to the intricate rate structure itself. It takes time for any government body like the Interstate Commerce Commission to adjust itself and its organization to a new set of legislative conditions. It takes time for a new body like the Railroad Labor Board to find itself. It takes time to bring out co-ordination between these two bodies, respectively controlling the two vital factors of railway revenues and expenses. It takes time for the railway managements and the railway employees to adjust themselves to the new conditions.

In the fourth place, and following close upon what has just been said, certain sections of the act have yet to be interpreted through judicial process. I have already referred to the two decisions of the Supreme Court, defining the rate-making powers of the Interstate Commerce Commission. Other provisions will and must come before the Supreme Court for final review. The powers of the Railroad Labor Board have not yet been fully defined. The process of subjecting the several provisions of the Transportation Act to judicial interpretation and review is a toilsome effort.

If the process of applying to actual railway conditions the provisions of a new and fundamental piece of legislation such as the Transportation Act is slow and cumbersome, it follows that we have not yet completed the period of testing the act. It also follows that the people of the United States, including the farmers, the shippers, the railway managements, and railway labor, must exercise an almost infinite amount of patience, while the faulty or incomplete workings of the law are gradually improved. It follows as an added step, a step that is as fundamental as it is logical, that the time is not yet here to consider important modifications of the act, before adequate test has been applied to its operations over a sufficient period of time. I say this with full recognition of the fact that opposing currents of public opinion have already developed relative to several important provisions, such as those under which the Railroad Labor Board was created.

Finally, and in some ways most important of all, we have before us today hopeful signs of a change for the better in our economic situation. This situation will not wholly clear up until there is greater economic stability in foreign countries, but there are signs of improvement even there, and we may venture the hope that an upward swing in our financial and business conditions is now beginning. Only after prices, rates, wages, and other economic factors have arrived at a point approximating equilibrium can a fair test be made of the provisions of the act. Only after the process of definition, interpretation and review of the act has been completed will it be possible to appraise as a whole its various provisions.

PERSONNEL PROBLEMS AND THE BUSINESS CYCLE

BY PAUL H. DOUGLAS *

IT was the custom for most workers in the field of personnel during the years 1915–1920 to regard the problems which they then faced as problems that would in the main always be present. As events of the last two years have shown, this was a very incomplete analysis of the situation. It is now apparent that the labor problems which employers face differ vitally at varying stages of the business cycle, and that in consequence business policies in dealing with such matters necessarily will also vary greatly.

The characteristics of the prosperity phase of the business cycle are well known. Briefly they are the following: Increasing prices, accompanied in the early stages by a slower increase in costs (particularly in wages) and hence by a wider margin of profit. This, in turn, causes business firms to expand their output and to use not only more material but to employ more labor. This increase in the amount of labor takes two forms: (a) The employment of the more inefficient workers who in other periods are either unemployed or greatly underemployed; (b) the working of more hours per week or year by the more efficient who are already employed. As a result of both of these factors, unemployment steadily decreases.

This general movement, characteristic of the prosperity phase of every cycle, was intensified during the five years from 1915 to 1920. The European War at once shut off the vast numbers of immigrants who, prior to 1914, had been entering the country at the rate of over a million a year, while at the same time by reason of the placing of war contracts with American manufacturers, it greatly increased the demand for American products. Labor rapidly became less and less plentiful relative to the demand. Our entrance into the war in 1917 increased this double strain. There was an imperative necessity for greatly increased production, while at the same time the labor supply was being still further curtailed by the entry of approximately four million men into the military and naval forces of the country. A real shortage of labor ensued which progressively grew more stringent. Employers began to bid for labor and the labor market became increasingly a "sellers" market where the buyer or the hirer was placed at a disadvantage.

This situation in turn necessarily created many problems. The most evident was that of the great increase in labor turnover. Due to the competition for labor, the wage scale was rising and workmen in order to better their conditions would move to the establishments offering higher wages. In addition, the fact that there were so many jobs open for men encouraged those to leave and go elsewhere who, for one reason or another, did not like their work. As a result the years 1916–1920 were characterized by an unprecedented mobility of labor. Brissenden and Frankel, in their painstaking study of labor turnover, show the turnover rate for 84 establishments in 1913, as compared

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with 176 in 1917–1918, to have been as follows:[1]

Period	*Turnover Rate per 10,000 Labor Hours*	*Relative Turnover*
1913–14	3.1	100
1917–18	6.7	216

The turnover seems, therefore, to have approximately doubled during this period over the pre-war figures. This increase seems to have been more marked among the unskilled workers than among the skilled, Brissenden and Frankel's figures indicating that whereas the turnover among the unskilled was twice that of the skilled in 1913–1914, it was over three times as great in 1917–1918.[2] The character of the separations from employment during these years of the up-swing of the cycle, moreover, varied from that which had formerly prevailed. The percentage of lay-offs naturally decreased while those of voluntary separations rose rapidly.

This high labor turnover—while perhaps not a loss to the worker—was a source of great expense to the employer. The more commonly appreciated items in this cost were:

1. Increased employment costs.
2. The loss of overhead during the time the vacated positions were idle.
3. Increased training cost of the new men hired to replace the old.
4. The decreased production of the new men.
5. The increased spoilage of materials, damage of machinery, and increased accident hazards.

These items, however, were not all. Because of the increasing wage scale, the employer was commonly compelled to pay a higher wage than that which had been paid to those that had left. It was this last item of cost which, although seldom mentioned by personnel workers, probably irritated the employer more than any other, and made him anxious to decrease this mobility of labor which was compelling the wage level to rise so rapidly. The introduction of these new men at the higher rates, moreover, increasingly caused trouble by making the wages of the old employees who had stayed with their respective concerns, disproportionately low in comparison. A large percentage of these old employees left in consequence. Many others sulked at their work and in some cases they unionized in order to employ collective pressure upon their employers.

Since concerns were compelled to hire men in such enormous numbers, both to replace those that had left and to make net additions to the working force, the machinery of hiring by the foremen and superintendents almost completely broke down. Even had there been large numbers of men at the factory gate, the foremen could not have spared the time to interview and select the large numbers that were needed. But there was no such queue waiting for work outside the gates. Men had to be secured from other sources, perhaps enticed from other plants. These were burdens too heavy for the already overburdened shoulders of managers and foremen. Business managers began to realize that in the interest of efficiency they must devolve these duties upon others who would make it their chief task. In this way, hundreds of employment departments were created which were in reality primarily centralized recruiting stations manned by pay-roll clerks and labor "scouts," whose task it was by hook or crook to find sufficient labor to keep the shop filled and to rush men into the plant at least at as fast a rate as they left. A great deal was said about the necessity of selecting "the

[1] Brissenden and Frankel, "The Mobility of Industrial Labor." *Political Science Quarterly.* December 1920, (Vol. XXXV) p. 580.
[2] *Ibid.*, p. 586.

right man for the right job," but in practice what these departments were chiefly concerned with was in getting any man for any job. The much described methods of selection such as trade tests, psychological tests, and so forth, were used in only an infinitesimally small percentage of cases. Physical examinations were also slighted. In the presence of a great demand for labor, employment departments could not scrutinize the qualifications of the men they were able to find.

The hiring of these men in such quantities brought with it the great problem of training them for their work. The numbers that came in were so large that foremen could not give the necessary instruction. Moreover, there was a progressive improvement of status upon the part of the workmen whereby semiskilled men entered skilled positions and many unskilled entered semiskilled jobs. The very large percentage of the newcomers in any plant therefore did not have the trade background for their particular job which the worker in less feverish times ordinarily had possessed. This was of course conspicuously true in the mushroom war industries, where totally new products were being turned out and where there was consequently no reservoir of experienced industrial workers to draw upon. Old firms, however, producing well-established and standard lines of goods, found themselves in a similar plight, due to the general displacement of labor which the war caused. These firms were typically compelled to take either half-trained or untrained men for positions which would formerly have been occupied by more skilled workers.

Because of this influx of relatively "green" labor into industry, with the consequent dilution of labor, it became vitally necessary to give these men some training for the jobs which they were assuming. There was necessarily, therefore, a great increase in the number of specialized training departments that were established. Many plants installed vestibule schools in order to break the newcomers into the plant more easily, while others added specialized instructors who either gave training at the position itself, or in supplementary classes outside of shop hours.

So great was the scarcity of men that it was felt necessary to check the habits of free discharging which the foremen had in the main developed in the period of a plentiful labor supply. The employment departments were given powers, therefore, not only over "hiring" but frequently over "firing" as well. This reviewing of discharges probably did help to conserve the labor supply but in addition it did two other things. It aroused the resentment of the foremen and raised anew the question of how far the staff type of organization should take over the previous functions of the line. Secondly, it raised the issue as to whether the worker did not deserve a hearing before a somewhat neutral body if he believed he had been unfairly discriminated against by his foreman.

Another source of labor inefficiency that was increased by the situation of the labor market was that of absenteeism. The percentage of absenteeism rose steadily, caused by the increase in wages, the longer hours worked, and the lessened fear of unemployment. It was no uncommon experience for a firm to find that from 10 to 15 per cent of its force were absent daily. Indeed, a conservative statement for the country as a whole, was perhaps somewhere between 6 and 10 per cent.[3] Employers tried to

[3] P. H. Douglas, "Absenteeism of Labor." *Political Science Quarterly*. Dec. 1919.

companies who have published such papers within the last five years and questionnaires sent out to these concerns brought 175 replies. Seventy-one per cent of these reported that they had commenced publication between the years 1917–1920 inclusive. It seems fair to estimate that this percentage is approximately accurate for all the employee publications, and that not far from four hundred of these journals were launched during the four feverish years of business expansion.

The great increase in employee representation plans, whether called shop committees, works councils, or "industrial democracy" systems, is well known. The National Industrial Conference Board in its investigation of Works Councils found that by August 1, 1919, at least 235 plants had some such method in operation. The overwhelming majority of these plans had been the product of the previous three years. The number of these systems, moreover, increased appreciably during the remainder of 1919 and 1920, until in the latter part of that year, the writer estimated their number at somewhere between three and four hundred. The predominant purpose behind the formation of these committees was to make concessions to the rising tide of the power of labor by recognizing the principle of collective bargaining without being compelled to deal with the unions. In the main, the shop committees provided a system of non-union collective bargaining, although the scope of their functions naturally varied and was indeed greatly limited in many instances.

Many other firms, notably those in the men's clothing industry, found themselves forced to go even further and to sign collective agreements with the unions, in the hope that this contract would both stabilize their working force and prevent the competitive bidding up of wages.

The purpose of all these methods was, as has been said, to knit the worker more closely to the employer and to secure his loyalty and long service. It seemed at last to many that a reconciliation was being effected between Capital and Labor. Capital was protesting quite loudly that it wished to be reconciled, and ardent expectants of the new day believe, indeed, that it dawned. If one's memory fails as regards these hopes, he has only to turn to the flood of literature upon personnel problems that appeared in these years to realize how vivid and insistent was the belief that a new science was being developed which would materially lessen the old antagonisms.[7]

But in the early summer of 1920 something happened. Orders in many industries fell off abruptly. It became necessary to curtail production; prices dropped. The business cycle swung downwards into a period of depression, and personnel workers were awakened from their dreams of a rapid expansion of their work by the cold-shower bath of reality. Most of them have been spending the last two years trying to determine what has struck them.

II

The characteristics of the depression phase of the business cycle have become almost as well known as those of the prosperity phase. In brief they are as follows:

1. A falling off in the volume of orders
2. A decrease in the price level
3. A decline in the working force
4. An increase in unemployment

[7] Such books as Common's "Industrial Good-Will," and his belated "Industrial Government;" Frankel and Fleisher's "The Human Factor in Industry;" Bassett's "When the Workmen Help You Manage;" Baker's "The New Industrial Unrest;" Tead and Metcalf's "Personnel Administration;" and the collections edited by Daniel Bloomfield are all illustrative of this.

These factors in turn powerfully affect the personnel problems and policies of specific firms. Labor turnover, in the sense of replacements, falls away almost to nothing. (Incidentally, the experience with a declining work force should establish once and for all the theoretical superiority of replacements over separations as a measure of "turnover.") Men are very loath to leave their jobs, because they know that there are few if any positions elsewhere, and that there are vast numbers of men looking for whatever jobs there are. Thus a large publishing house which had a labor turnover of approximately 235 per cent in 1918, had a labor turnover during the summer months of 1921 of only 25 per cent, while the turnover in a large paper box factory in 1921 was approximately only one-fifth what it had been in the corresponding months of 1920. The rapid decline of labor turnover during a period of depression is perhaps most strikingly illustrated by the experience of a steel plant which in July 1921, had a turnover, reduced to a yearly basis, of 402 per cent, while in December of that year, after the business depression had hit the industry, it amounted to only 7 per cent.

This great decrease in the amount of labor turnover, added to the fact that the number of men at work is contracting, not expanding, means that very few men are needed. Hirings drop away almost to nothing. In consequence, the employment machinery which had been largely created to meet the needs of the prosperity phase of the cycle becomes almost wholly idle. The relative disappearance of fresh hirings, moreover, obviates the necessity of a training department to instruct the novices. Not only are few men selected but those that are selected are generally fairly skilled operators and hence need little instruction. Since men are no longer at a premium, the foreman tends more and more to retrieve his former power over discharging.

At the same time absenteeism declines. Since men now seldom dare to stay away from their jobs lest they be discharged, it becomes unnecessary to continue paying bonuses for attendance. Such bonuses are in general terminated, and home-visiting for absentees is either curtailed or eliminated.

Throughout the depression phase of the business cycle the old incentive of fear is coming back with increasing force. Once more the workman sees lines of applicants outside the factory gates. Once more he fears for his job since he knows that jobs are few and men are many and that he will be replaced by another man should he not give satisfaction. The fear of unemployment serves, therefore, to make men work harder than they did in the period before the depression. Thus in the Chicago building trades, where as we have seen, the average daily number of bricks laid per 8-hour day had decreased from between 1500 and 1600 in 1914–1916 to less than 800 in the years 1918–1920, by the winter of 1921–1922 the average on comparable types of work had increased to between 1200 and 1300, or an increase of something over 50 per cent above the low water mark. In the automobile tire industry of Akron, Ohio, it is reported on excellent authority that the output per man-day rose from 1.4 in 1920 to 2.8 by the middle of 1921 or a virtual doubling of output.[8] The Edison industries report that after the working force was cut in half the output per man increased approximately 60 per cent.[9] Mr. Samuel

[8] Ingalls, *op. cit.*, p. 33.

[9] A. S. Meyers, "Re-establishing the Profit Margins in the Edison Industries," *Industrial Management*, March 1922 (Vol. LXIII) p. 132.

Insull, President of the Peoples Gas, Light, and Coke Company, of Chicago has testified that the gas produced per man in 1921 was approximately 66 per cent greater than in 1920. This, however, was not due entirely to increased labor efficiency but in part at least to improved technical processes. The author has computed relative production figures for a middle-western woodworking plant which throw interesting light upon this question. The number of man-hours for comparable months in 1920, 1921, and 1922 are given and these are expressed in relatives, with the figure for 1920 serving as the base or 100.

Period	Relative Employment		Relative Production	
	Average Number Man-hours Worked per Week	Relative Number Man-hours Worked per Week	Average Output in Units per Man-hour	Relative Output in Units per Man-hour
First quarter 1920	5512.5	100	.440	100
First quarter 1921	4005	73	.518	119
January, February, 1922	3560	65	.583	135

The above table tells its own story. Output increased 19 per cent in 1921 over the 1920 figures and 35 per cent by 1922. There may be an interesting relationship in the fact that the number of man-hours in 1922 had decreased by 35 per cent while the output had increased by 35 per cent.

The records of a middle-western plant manufacturing motors show an even greater increase. In April, 1920, this firm employed 1080 men and as a result of the acute business depression so reduced its force that by February, 1921, it was employing only 235. Despite this curtailment in the force to less than one quarter of its former figure, the output decreased only approximately 40 per cent. The exact nature of the increase in production per man amounting to 166 per cent, can be seen from the figures on the following page.

A somewhat similar increase is reported by a small plant which originally employed a force of 25 men which was reduced to 22 after the first slump in business. Despite this reduction, the output remained the same and the employer cut down his force again, this time to 14. Production went up 25 per cent. Thus a force of 14 men were now producing what it would have required 31 to turn out at the previous output rate. This was, in other words, an increase in output per man of approximately 120 per cent. When the Ford Motor Company resumed full-time production in the early part of this year, it found that 40,000 men were sufficient to turn out the same number of cars that it had previously required 57,000 to produce and that in addition many more parts were being made. It will be seen that this was an increase in output per man of approximately 43 per cent.

One of the most striking and amusing illustrations of this tendency of unem-

Period	No. of Men on Force	No. of Motors Produced in a Given Period	No. of Motors Per Man	Relative Output
April, 1920	1080	1038	.96	100
February, March, 1921	235	600	2.55	266

ployment to increase output per man-hour was the experience of the Detroit firm that found itself with a heavy supply of manufactured goods in the summer of 1920 when the market began to weaken. Wishing, naturally, to cut down the amount of capital tied up in this stock, it reduced its force. Much to its surprise, it found that it was producing even more per week than before and that its situation from this standpoint was worse than ever. It cut its force again only to find that its stockroom was filling at a faster rate than ever!

In a word, the labor market becomes once more a buyer's market and it is not necessary for the employers to cajole their labor into granting an increased output. The whole pressure of economic forces tends to force the workmen to produce more, to be steadier at work, and to be more docile. The average business, therefore, will tend either to abolish its employment and personnel department, or radically to curtail the number of members in it. Indeed it is probably safe to say that the reduction in the number of personnel workers proceeds at a faster rate than the reduction in the number of workmen. The unemployment of employment managers becomes patently evident. Group insurance is either terminated or new policies are not taken out. House-organs are stopped by the hundred and welfare work is cut to the bone. Thus 73 per cent of the firms that replied to our questionnaire concerning house-organs stated that they had discontinued them during 1921. The great demand of the business man is to eliminate most, if not all, of the "fancy overhead."

Employers in general decide to make war upon the unions, and the shop committees that have been created find themselves shorn of effective power either to request a wage increase or adequately to determine the working conditions in the plant. There seems to be but little doubt that the wage cuts have been far more severe in the plants with shop committees than in those that have been strongly organized. This, of course, merely confirms the analysis already made by several students of labor problems who have pointed out that the isolated shop committee has far weaker bargaining power than the typical union. In some cases, the shop committees' approval has not even been sought before the wage cut was put into effect, but instead they and the workers were faced with a *fait accomplit.* In other cases, the proposed cut has been placed before the shop committee which has almost invariably given its consent to the proposition. Two divergent morals have been drawn from this latter tendency. The first is that by this course, the shop committees have shown themselves to be both more intelligent and co-operative in their course of action than the unions. The second is, that it is merely another convincing proof of their impotence on all basic matters, and that they acquiesced because they could not do anything else. One's choice of these

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morals will largely depend upon the rapidity with which he believes wages should decline in a period of falling prices.

Personnel work in general goes through a period of liquidation, of which at least a partial proof is the recent disbandment of the Industrial Relations Association of America, an organization which starting in 1916 with much publicity, had by the spring of 1920 attracted to its meetings nearly 2000 delegates.

It would, however, be erroneous to conclude that the depression phase of the business cycle merely removes existing personnel problems and does not create new ones. Perhaps the most important new problem which is created is that of determining the proper reduction in the working force. This involves a number of questions which may be classified under the following heads:

1. By how much should the working force be reduced? If business was decreased by 20 per cent, *by how much* should you reduce the working force? By precisely 20 per cent. Why not 30 per cent?

As has been pointed out, there will generally be an increase in output per man and hence unless there are other considerations, the working force can be curtailed at a more rapid rate than is production.

If business falls away greatly, however, perhaps almost to nothing as has been the case with many machine tool concerns, can you let all your force go? If you do this what will be your situation when business begins to revive? Is it not necessary to retain the important workmen for as long as possible in order that you may be sure of their services when you need them again? How many of these men do you wish to hold and how can you hold them? The answers to these questions necessarily will vary according to the degree of automatization of work in each plant. Where little or no skill is required, there is little incentive, so far as purely business motives prevail, to hold these men on the pay-roll, since just as satisfactory workers can be secured when business starts once more to improve. When, on the other hand, a high degree of skill is required, or where the worker knows peculiar plant methods or processes, it is to the interest of the employer to retain the workers as long as possible. What is ordinarily regarded as a direct labor cost, may become therefore an overhead cost in times of depression. A very important phase of business judgment in times of depression is that of determining the approximate point at which the losses of holding specific men on the pay-roll, when they cannot earn what they are being paid, are greater than the gains which can be expected to accrue when business picks up, because they are still with the company.

2. Allied with this problem is that of the proper method of distributing slack time. If a business is running at only 50 per cent capacity, is it better for half of the men to work full-time or all of the men to work half-time?[10]

It is urged by many that businesses in general should not so much curtail their working force in times of depression as to afford part-time employment to all. This view is in the main justified from the social standpoint, since the added dollars of the men who worked full-time would probably not mean as much to them as their loss would mean to those who were completely unemployed. Half-time for all would undoubtedly cause less suffering

[10] I am stating the alternatives so baldly merely to bring out the issue as clearly as possible. In practice it might be better, for example, to discharge or completely lay off 25 per cent of the force and work the remainder on two-thirds time.

than full-time for one-half and unemployment for the others.

It is extremely difficult, however, for businesses in our present economic order always to be guided by the social point of view. Not only is the money-making purpose the chief existent guide, but in periods of depression it becomes a struggle even to survive. It is inevitable therefore that "business" considerations should in the main prevail, although there will be some high-minded employers who will strive to protect their workers even at a money cost.

What, then, are the "business" aspects of the "sharing work" proposal? In the first place, it would be distinctly advisable in those cases where the amount to be shared is insufficient to provide with full-time employment all the men that the employer wishes permanently to retain. When, however, it would mean retaining a relatively inefficient man on half-time, and causing a far more efficient worker not to be employed full-time, there would be a distinct present loss.

Furthermore, it should be pointed out that the principle of the equal distribution of work will probably tend to result in a greater withholding of effort and lessened production on the part of the workers as a whole. Since they are to share equally in whatever work there is, it is naturally to their interest to spread this out over as long a period as possible. The fear of unemployment under these circumstances therefore makes men loaf. This conclusion seems to be in striking contrast to that which has been advanced earlier in this article, where it was shown that the fear of unemployment made men work harder. This apparent paradox, however, is explained by the fact that the fear of unemployment makes men work harder when the workers are afraid that although the *work to be done* will continue, they will not be allowed to *work at it*, unless they increase their output. The fear of unemployment, on the other hand, will lead men to slacken their efforts if they believe that they will *work at* the *work* as long as there is any.

3. A further problem that presents itself is that of who should decide what specific workmen should be laid off and how the decision should be reached. It is perhaps the typical practice to allow the foremen exclusively to determine who should be laid off. This has the disadvantage, however, of affording an opportunity for the satisfaction of personal grudges and there have been many cases where very valuable men have been dropped in a period of depression merely because of personal dislike on the part of their immediate superiors. The remedy is plainly to have a board who would consider and decide upon lay-offs, with the assistance of accurate data upon the man's past record in the company. Production records, past ratings, and a knowledge of the general history of workers in the company are thus seen to have great value not merely for promotion and transfer, but for lay-offs and discharges as well.

Another set of factors is that of the extent to which matters other than strict production should be taken into consideration in determining who should be laid off. What weight for example should be given to seniority? It is interesting to note that the principle of seniority tends to be followed far more completely among public utilities, where there is monopoly protection than in the ordinary run of competitive business. This may be due both to the tendency to provide a more secure status for all engaged in businesses that are shielded from the storms of competition e.g., the army,

the navy, and the civil service, and to the fact that in many of these concerns it is difficult, if not impossible, to measure individual efficiency; and length of service may well be the most presumptive proof of a man's value to his employer.

Even more soul-trying is the question as to the extent the family responsibilities of the worker are to be taken into consideration. Everyone would agree that where other things were equal, that relative family responsibilities should decide. The problem comes when all other things are *not* equal and it can only be settled by the firms deciding firmly whether they are to follow a policy of strict money-making or are to take account of humanitarian considerations.

4. A still further moot point is that of the manner in which the men should be laid off. It is the custom of a very large percentage of plants to give no notice to those who are to be laid off but to resort to the method of the familiar blue slip. This has been due, not to any desire to be cruel, but to the fear that if the workmen were notified in advance that they were to be dropped, they would sulk and loaf at the work and stir up discontent and dissension throughout the plant. Although one can understand the reasons which have led to the adoption of this policy, it is doubtful whether businesses have sufficiently considered the suffering which it entails and the resentment which it engenders. A man who suddenly finds himself out of a job in a falling labor market not only suffers a severe mental shock but is greatly handicapped in securing other employment. For families with as narrow an economic margin of safety as those of most American workmen, this frequently causes physical as well as mental hardship. Furthermore, how can firms legitimately expect workmen to give them notice of leaving in the periods of prosperity, if they do not notify their workmen of lay-offs or discharges in periods of depressions?

If the firm believes that it would seriously weaken plant morale to have these men at work knowing that they were to be laid off, then the least that the company can do is to give them an additional wage for one or two weeks to help tide them over the period of looking for work. This is very frequently done in the case of clerical workers and it is just as applicable to manual workers. The company, moreover, should very properly try to place the men it lays off with other concerns, particularly if they have been capable employees.

Another major problem which inevitably presents itself during the period of depression is that of the proper wage policy to pursue. In general it will be found necessary to lower wages, but by how much? Frequently, concerns err in lowering wages much more rapidly than either the reduction in the cost of living or the general wage level of the locality would justify, and, in consequence, reap a great deal of labor unrest and discontent. The downward movement of wages does indeed afford an opportunity for the realignment of wages and salaries, and the ironing-out of the discrepancies which were brought about by the up-swing of the business cycle in general. It is therefore better to survey the whole wage and salary situation before making a reduction, and it is generally true that a flat reduction, applying equally to all classes, is not as equitable as a reduction which attempts to bring the pay of the various grades once more back to relative harmony. In general, the personnel problems of the depression period are problems for the executive and do not require a large administrative force.

III

It is probably inevitable that business concerns motivated by the desire for profits should radically curtail their personnel activities in a period of depression. Most of the former problems of force expansion, turnover, lack of trained workers, withheld effort, and absenteeism, either disappear completely or are greatly reduced in intensity. With this abatement of the former pressing problems, it is inevitable that the staff of personnel workers should be radically curtailed. In many plants indeed, the number of such personnel workers has decreased at something approaching a geometrical ratio while the working force has declined at only an arithmetical one.

From the long run point-of-view, the policies which companies feel themselves compelled to adopt in laying men off, in cutting wages, and in the general utilization of fear rather than good-will as the incentive to effort, may create serious consequences in the future when conditions begin to improve and the economic strength of labor increases. Labor has least in part something of a collective memory, and it may well be more difficult for the employer to appeal to good-will when the workmen have the economic balance of power if he has not followed this policy when he was uppermost. J. T. Murphy, a leader in the English Shop-Stewards movement, in the following succinct statement shows that there are sections of the world of labor who are conscious of the alternating "Good Lord-Good Devil" policy which has all too frequently constituted the labor policy of employers:[11]

> It is noticeable that when there is a shortage of labour that the talk of "mutuality of interest" of employers and employees is most clamorous. When there are large numbers of "libertarians" hanging around the works gates, fearing the liberty to starve, the harmonious song subsides and once again the right of the employer to determine the conditions of his "commodities" asserts itself.

It is extremely difficult, however, for individual firms in a competitive society to see these factors and to take them into account.

The more one examines the subject, the more one is impressed with the powerful influence of the business cycle upon all phases of industrial life. One of the most pressing problems which our modern industrial society must face, if it is to function with any large degree of efficiency, is to control the business cycle and either to eliminate or greatly lessen the violent fluctuations between prosperity and depression which now occur. Such proposals as Professor Irving Fisher's plan to stabilize the purchasing power of the dollar, the suggested control of credit in periods of prosperity, and the penalization of the employers for unemployment are worthy of the closest and most sympathetic attention by those who wish to put personnel relations in industry on a stable footing and not have them continue as the football of violently fluctuating business conditions.

Finally, if it is impossible greatly to lessen the fluctuations of business conditions, the public must be prepared to make up for the breakdown of sympathetic personnel relations between employer and employee in periods of depression by adopting policies of unemployment insurance,[12] providing public works, and furnishing industrial training to the unemployed.

[11] J. T. Murphy. "Compromise or Independence—An Examination of The Whitley Report." *Sheffield Workers Committee*, 1918, p. 6.

[12] For the best and most recent work on this topic see J. L. Cohen's, "Insurance Against Unemployment," P. S. King, 1921.

THE LETTER OF CREDIT IN GERMANY

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FOR comparative purposes it may be well to preface Dr. Jacoby's article on German commercial practice, with a brief statement of American usage. Foreign trade is financed largely by means of the bill of exchange. It may be drawn by the exporter on the importer and so give rise to a trade bill. However, the exporter is often unwilling to draw his draft on the importer because the latter's credit standing is usually unknown. Under these conditions the exporter prefers to draw his draft on the importer's bank whose credit is more widely recognized. To facilitate the financing of the transaction, the bank issues an instrument known as a letter of credit authorizing the exporter, called the "beneficiary," to draw drafts on the bank which promises to honor, that is pay or accept them, upon presentation. Letters of credit may be either revocable or irrevocable, depending upon whether or not the issuing bank may rescind its promise to honor the drafts of the exporter. He may not even be satisfied with the right to draw on the foreign bank and insists that another bank, usually in his own country, "confirm" or endorse the credit. Hence letters of credit may be irrevocable or revocable by the issuing bank and further confirmed or unconfirmed by a second institution generally called the notifying or advising bank which usually informs the exporter that a foreign bank has opened a credit in his behalf. He usually receives payment on the presentation of certain shipping documents such as a bill of lading and marine insurance policy and the credit is called documentary. However, he may obtain payment without having to submit any documents, and he then is said to receive a clean credit. A distinction must be drawn between a commercial and a traveler's letter of credit. As mentioned above the former is an authorization addressed to the beneficiary while the latter is written by the issuing bank to its correspondents which are asked to honor the drafts of the drawer. The definition classifications and relations of parties sketched above differ from German practice which is described in the following article.

The "akkreditiv" or letter of credit was known in Germany before the war mainly in connection with overseas transactions in which a bank extended credit to an importer by accepting a draft against delivery of documents evidencing title to goods. The letter of credit was used in international transactions mainly with countries east of Germany to finance the importation of food products from Russia and Galicia into Germany, England, and France. However, in Germany's domestic trade, the letter of credit was almost unknown.

The war and especially the post-war period altered the status of the letter of credit. On the one hand, a change in the overseas credit business has been

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brought about through the preference for making payment in cash against delivery of documents. This is due to the fact that exporters no longer grant long terms of payment to the same extent as before the war, and also that the accepting of drafts at the high rate of foreign exchanges involves a great risk for German banks. On the other hand, in the post-war period the letter of credit has been used to a great extent in the domestic trade. This is caused not so much by the improvement of the methods of payment through the letter of credit as by the great decrease of business morality. The seller does not wish to part with his goods before he is sure of payment, while the buyer in turn does not want to make payment as long as the goods remain in the hands of the seller. The parties thus avail themselves of the service of a bank as a trustee in escrow or as a stakeholder. Another reason for the rapid expansion in the use of the letter of credit in German domestic business is the fact that domestic commerce at the present high prices cannot well be financed by the merchants themselves and so they are forced to apply for bank credit.

I. Meaning of Terms

(a) *Documentary Credit.* The term "akkreditiv documentary" (credit) which is here under consideration is applied to the entire legal relationships between the buyer who orders his bank to issue a credit, the bank which accepts the order and which either refers this order to another bank or communicates directly with the beneficiary, and lastly the beneficiary or seller of the goods in whose favor the credit is opened. No distinction is made in Germany between an export and import letter of credit. It is immaterial to the bank whether it notifies the domestic exporter at request of the foreign importer, or advises the foreign exporter at the request of the domestic importer, and whether one or more banks are involved in the transaction. The parties to the letter of credit are always the same: The buyer as opener; the seller as beneficiary; and the bank acting as trustee in escrow and which, in order to fulfil its function, may avail itself of the services of another bank as notifier in the country of the exporter.

(b) *Clean Credit.* In addition to documentary credits, there are clean or "open" credits in which a bank is instructed to make payment to a beneficiary within a certain time or at given periods, and the submitting of documents is not necessary. A form of clean credit is the traveler's letter of credit. Commercial and traveler's letters of credit both aim to place funds at the disposition of a beneficiary. The difference, besides that of a legal nature, is that the beneficiary of a traveler's letter of credit carries the document with him and presents it himself, while in the case of a commercial letter of credit, German banks do not issue a document in which the individual drawings are noted, but instead instruct the paying banks to make payment directly.

(c) *Counter Credit.* Sales contracts sometimes provide not only for a letter of credit in favor of the seller, but also for a "counter credit" in favor of the buyer. The purpose of this instrument is to assure the buyer that goods will be delivered by the seller in strict observance of the sales contract. A counter credit is regularly issued by banks which bind themselves to pay a certain amount of money in case the seller does not meet his obligations according to the contract of sale. A counter credit is not

a true letter of credit, but is rather a bank's guarantee to the buyer. The amount stipulated in the counter credit is more or less in the nature of an indemnity to the buyer in the event of non-delivery by the seller. As economic conditions become more stable in Germany, the counter credit will fall into disuse.

II. Classes of Letters of Credit

German banks distinguish between revocable and irrevocable credits on the one hand, and confirmed and unconfirmed credits on the other. As the expression "akkreditiv" embraces the whole credit relationship, the terms "confirmation" and "irrevocability" relate both to the application for a credit as well as to the advice sent by the notifying bank to the beneficiary. The terms "confirmed" and "unconfirmed," "revocable" and "irrevocable," are regarded in commercial practice as synonymous. However, one must bear in mind that a difference exists, since cases are possible where an irrevocable credit is not confirmed, or a revocable credit is confirmed. The latter case would never arise in actual practice as banks in Germany refuse to add their confirmation to revocable credits. Unconfirmed irrevocable credits are often issued, especially when the opener does not wish a confirmed credit. As the majority of German banks usually confirm irrevocable credits, and as many of them refuse to handle irrevocable credits which the issuing bank has been prohibited from confirming, one may conclude that in actual practice all confirmed credits are irrevocable and all unconfirmed credits are revocable.

Confirmation is expressed in the letter which a bank sends to the beneficiary either upon the instruction of the opener himself or of another bank acting on the request of the opener. This letter is usually described as a confirmed letter of credit. In addition to the notification of the opening of the credit, the confirmed letter contains the binding declaration of the issuing bank that payment will be made against delivery of documents, either by the bank itself or by another institution. The letter of confirmation is known in Anglo-American practice as a "Commercial Letter of Credit," whether it be an export letter of credit if the confirmation is made upon instruction of another bank, or an import letter of credit if confirmation is made upon instruction of the importer direct to the exporter. In both cases the bank binds itself in the letter of credit to make payment or to honor drafts. According to German law, no difference is recognized whether the confirmation is made orally or in writing. However, in domestic practice, oral confirmation is seldom used and in international trade it is impossible.

Naturally no confirmation takes place where a bank notifies the beneficiary in a non-obligatory manner of the opening of a credit. The bank sends such non-binding advices to the beneficiaries in the case of revocable credits. In these, the bank states that it reserves the right to revoke the credit and that the letter does not impose upon it any obligation of payment.

The practical difference between a confirmed and unconfirmed credit is apparent from the fact that under a confirmed credit the beneficiary has a separate claim upon the bank independent of the already existing legal relation between these two parties. The opener of the credit cannot cancel a confirmed credit without consent of the beneficiary. This prin-

ciple also operates when, under a credit with no stipulated date of expiration, the beneficiary has not availed himself of the credit within a reasonable time. In order to avoid difficulties which may arise from confirmed credits with no stipulated expiration date, there is a growing tendency not to accept such credits. Banks taking this point of view either refuse to issue such credits or handle them only as revocable credits and notify the beneficiary in a non-obligatory form. After the date of expiration has been fixed, the credit is then confirmed. Some banks limit their responsibility by stiulpating in their confirmation a definite period such as six or twelve months. Some German banks regard all credits with a stipulated expiration date as irrevocable within this period. The majority of banks, however, consider such credits as revocable, and notify the beneficiary only in a non-binding form unless the credits are expressly marked as "irrevocable" or "confirmed."

Distinction is usually made between a transferable and non-transferable credit. However, this is a very unsettled question, and is treated differently by various banks. If the expression "or order" is inserted after the name of the beneficiary or if the credit is marked as "transferable," then the bank is entitled to make payment upon the instruction of the beneficiary to a third party or to open an ancillary letter of credit on the basis of the primary credit. More doubtful is the situation when the word "or order" or "transferable" is not inserted. In my opinion the bank is bound to pay to that party who presents the documents in the name of the beneficiary as his agent or messenger, but the documents must correspond to the conditions stipulated in the letter of credit. The same principle holds when the bank on its own responsibility opens an ancillary credit and the holder of this credit presents the documents in the name of the first accredited party.

The purpose of a letter of credit is to assure payment to the beneficiary against delivery of documents. The amount mentioned in the letter of credit may be either fixed at an exact sum or only up to a maximum amount. Sometimes this sum may also be determined by the number of pieces or by the weight of the goods. Indefinite and vague expressions should, as far as possible, be omitted. When expressions such as "approximately" or "about" are employed, banks usually allow a margin of 10 per cent. Doubt sometimes arises whether a bank may make payment against documents evidencing partial shipment of the goods. This question is answered in the affirmative where the amount of money is readily determined according to weight and number, and where the application of the credit does not expressly prohibit partial shipment. In this case the applicant for a commercial credit must give definite instructions as to partial shipment and payment. It is also advisable that the applicant give clear instructions as to freight, i.e., whether the amount is c.i.f., f.o.b., factory, so that the bank should not be in doubt as to the handling of documents on which freight must be paid.

III. Shipping Documents

The essential feature of the documentary credit is the order given to a bank to receive documents from the beneficiary. The documents therefore must be carefully described in order to avoid litigation. Where detailed information is not given and where a bank is merely asked to re-

ceive documents, it will always ask for a full set of shipping documents, insurance policy, and invoice.

In German-American trade the ocean bill of lading is of primary importance. Its possession conveys, according to German law, full title to the goods. "Received for shipment" bills of lading if they mention the name of a vessel with or without a substitution clause reading, "and or other steamship," have the same status as "on board" bills of lading. Banks in Germany are therefore at liberty to accept even without special instructions both "on board" and "received for shipment" bills of lading unless the former have been expressly requested. German banks feel that they are not empowered to accept so-called "masters" receipts, or through bills of lading. In place of an insurance policy, German banks accept certificates issued by an insurance company or its representative. If no other stipulations are made, a bank accepts a simple commercial invoice or copy and does not ask for the original of the invoice. If the buyer wishes a consular invoice this must be stated in the application. Where an American importer has agreed to pay for the goods at the factory or at some other place in Germany the letter of instruction sent by the American issuing bank must specify not only the place of destination (the American port) but also state against what domestic documents and at what address payment should be made. An American importer not well versed in German conditions does well to turn over the entire matter to a German bank of good standing and to give it full power of disposition. A railroad bill of lading is issued for inland transportation. This document, however, has not the same importance as an ocean bill of lading and represents merely a certificate of the railroad without which the owner cannot dispose of the goods. Sometimes payment is requested against a forwarder's bill of lading. A careful statement should be made as to what data such a bill shall contain as otherwise the bank may accept any certificate. In most cases, a forwarder's bill of lading is in the form of a "warrant" which is non-negotiable and therefore with a few exceptions does not convey title to the goods. Sometimes other documents are necessary or requested such as import and export permits, inspection certificates, and health certificates. Where an export permit is necessary, a German bank regards a legal copy or a statement to this effect on the bill of lading as satisfactory. In case of an ocean bill of lading, the presentation of an export permit is unnecessary as the presence of the bill of lading is a sufficient proof of the existence of the permit, without which no ocean bill of lading can be issued.

IV. Relations Among the Parties Under a Letter of Credit

(a) *Applicant and Beneficiary.* The letter of credit is always based upon a contract of sale in which the buyer and seller formally agree as to payment and as to the party who will finance the transaction. The transaction may be financed by the exporter either under the straight collection method or under the seldom used "Vinculation" method. Under this latter practice, the bank presents the documents in its own name to the importer with the instruction either to pay immediately or to reject the goods. This method was used only in financing trade between Germany and the countries of the east.

A transaction may also be financed by the importer, generally through a

letter of credit in which he instructs his bank to honor the drafts of the exporter against delivery of documents. It is then stated in the contract of sale, that payment must be made through a letter of credit. The opening of the credit thus becomes a requirement of the contract of sale and the seller does not fulfil his duties as to delivery until the credit is issued. If the buyer does not open the credit in time, the seller may, according to German law, either withdraw from the contract or sue for damages. If the credit is to be opened within a given time, the letter of the bank issuing the credit must reach the seller within this time. If a confirmed credit has been agreed upon, the buyer must open an irrevocable credit and have the bank confirm it. If a confirmed credit has not been expressly requested, it then depends on the individual case whether a binding or non-binding advice of the credit should be sent by the bank to the b neficiary. A recent decision holds that the intention of the parties is to open a confirmed credit if no statement is made as to confirmation.

As already mentioned, the beneficiary in the case of a confirmed credit has a claim upon the bank. But in the case of an unconfirmed credit, if the bank refuses payment because the applicant has revoked the credit, the seller still has a claim against the buyer.

(b) *Applicant and Bank.* As already stated, the relation between these two parties is in the nature of an order for payment or acceptance of drafts against delivery of documents. The opener or applicant of a credit may be the buyer himself, or a foreign bank which upon instruction of a foreign importer applies to a German bank for a credit. The application for a credit must not necessarily be in writing, as an oral order is sufficient. The applicant must carefully state the conditions of the credit and above all must pay attention to documents, date of expiration, name of beneficiary, and especially to the question of cancellation and confirmation.

After approving the application for a credit, the bank binds itself to fulfil the order with the care customarily exercised by banks in such transactions. After the receipt of the application, the bank must determine what steps are next to be taken. Where confirmation has been specifically requested or is implied from the application, as, for example, if the credit is irrevocable, the bank must issue and also confirm the credit. Where confirmation has not been sought especially when the credit is revocable, it is nevertheless the practice in Germany for banks to notify the beneficiary of the credit. If the bank disregards the instructions of the opener, or does not exercise due care, the opener may refuse to recognize the executed transaction and may sue the bank for damages. The bank must therefore strictly observe the instructions given by the opener. If documents presented by the beneficiary are not in accordance with the application of the credit, the bank naturally must reject them. However, it can meantime send for instructions from the opener as to whether or not payment should be made. In the case of slight discrepancies, the bank often makes payment but then asks for a guaranty to cover these irregularities. But the bank acts entirely on its own risk. Another way to handle discrepancies is for the bank not to pay immediately but to take the documents for collection and to credit the beneficiary's account only after the opener has accepted the documents. The latter does not know anything of this procedure.

In examining documents the bank must note whether their expiration date is in accordance with the application. That is the case when the documents are presented to the notifying or confirming bank, or to the institution which negotiates the drafts before this date. If the documents are not remitted to the bank through the mail, then the customary office hours of the locality will apply. In case the day of maturity falls on a Sunday or on any other legal holiday, the day of maturity will lawfully be the first following week day. A few banks in such cases pay only up to the last week day before the Sunday or holiday. If documents are presented after the day of maturity, the bank is not allowed to honor them without the consent of the opener, and not even then is it permitted to pay if the documents had been presented beforehand and have been returned to the beneficiary for correction because of non-conformity with the letter of credit. Irrevocable letters of credit do not become revocable after the day of expiration. If the maturity date refers to the act of shipment, the bill of lading must bear this stipulated date. Banks often reserve for themselves the right to regard the date of the bill of lading as the day of shipment even in the case of a received for shipment bill of lading. If prompt shipment is requested, the bank is allowed to honor documents provided they are not dated for too long a time after advising the credit to the beneficiary. A month is usually considered customary.

In the case of revocable unconfirmed letters of credit, the bank is allowed to pay only if no revocation by the opener has been received up to the time of payment. A bank must assume the duty of forwarding notice of revocation to the beneficiary.

In accepting documents, it is the duty of the bank to examine them as to whether they agree with the original order; above all whether the documents on hand are as designated and whether route, address, and weight are correct. In case insurance is mentioned, the bank must note whether this is properly covered. If insurance was mentioned, but if the dangers which the insurance is to cover are not named, only average risks must be covered. At the present time in Germany a policy covering average risk is regarded as satisfactory. If insurance is not expressly asked for, the bank does not ordinarily concern itself with the actual delivery of the policy, except in the case of ocean shipments where such action is generally regarded as a matter to be handled by the opener. To determine the amount of insurance the rule is to take the invoice cost in absence of special instructions, or the amount of the letter of credit in the absence of an invoice. This duty of the bank in examining the documents is limited to the extent of care customary in such transactions.

The bank cannot be expected to make a special investigation of the printed text of the bill of lading, and the stipulations of insurance policies and of warehouse receipts. In general, the bank does not hold itself responsible for the validity of the documents. If their appearance is suspicious in any respect whatsoever, it is best for the bank to confer with the opener of the credit, in so far as this is possible, and eventually to make reservations or to refuse payment altogether. The bank is liable to the opener for any carelessness on its part in accepting any documents which are irregular.

Special care must be taken by the bank to protect its own interests, if the documents convey title to goods

which serve as collateral for a credit granted to the opener. The bank must then determine whether or not the documents offer sufficient assurance that the goods are at its exclusive disposal and that in case of necessity it can fall back on them. If the bank has discounted a draft both drawer and drawee are liable according to the law of bills of exchange, for an exemption from this liability (without recourse) is not generally permitted by German banks.

The documents are forwarded at the risk of the opener, but the bank must use the precautionary measures customary in such transactions by sending them forward by registered mail on two different steamers.

For the services rendered by the bank to the applicant, the latter pays the letter of credit commission. The mere order for a letter of credit or its acceptance does not in itself permit the bank to charge a fee. It is only when the order is confirmed that the confirmation charge will apply. If payment is made and documents are presented, then the letter of credit commission becomes due, not only to the issuing bank but also to any other bank whose services the issuing bank employs in the execution of the order. If a confirmed letter of credit is not availed of, confirmation fees are not returned.

(c) *Relations Between Issuing and Notifying Banks.* The simplest form of a letter of credit is one in which the buyer requests the bank to make payment to the seller upon delivery of documents and the seller personally presents the documents at the bank which has issued the letter of credit. But payment cannot be made at a place where the bank has no branch and, therefore, it must use the services of another bank. The former then requests the latter to make payment on the same documents and on the same conditions. Also an importer may be in direct communication with a bank in the country of the exporter and requests it to make payment, as for example, an American importer acting through a Berlin bank which communicates with the beneficiary. The rule is, however, in most German business transactions in foreign trade for the bank of the German importer to make use of the services of correspondent banks in the exporter's country by making payment or confirming the credit through them.

(d) *Issuing Bank and Beneficiary.* If a bank receives an application from an importer to make payment to an exporter, and agrees to this request, this agreement by the bank does not impose upon it any obligation toward the beneficiary. This principle holds true for clean as well as for documentary credits, and is generally recognized in the highest German court decisions. In other words, no binding relation between the bank and the beneficiary is created when the former notifies the latter in a non-obligatory form of the opening of the credit. But it is a different case when the letter of credit is formally confirmed by the issuing bank to the beneficiary. Such confirmation, as already mentioned, amounts to any legal acknowledgment on the part of the bank, of a debt due to the beneficiary to the full amount of the confirmation. The confirming bank must pay either immediately on presentation of documents or at maturity of the draft, according to its agreement. But, on the other hand, there is no assurance in the confirmation of the credit that the bank has funds from the applicant from which to make payment, and for this reason the bank promises to pay out of its own funds.

If the letter of credit has been confirmed by the bank in a binding form,

it cannot permit the revocation or alteration of the credit by the opener, whether an importer or another bank. This may be assumed as universal rule, because practically all letters of credit which are confirmed by banks, are irrevocable for a designated period of time. In a rare case, where the bank confirms a revocable credit upon the request of an opener with the stipulation of revocability clearly expressed, then the liability incurred by the confirmation exists until the beneficiary receives notice of revocation from the bank. If the opener desires a change in the credit after confirmation, the bank makes the order dependent upon the consent of the beneficiary.

(e) *Conclusion.* The above discussion of commercial letters of credit in Germany can make no claim either to completeness or to universal application. As already mentioned in the beginning of this treatise, we are here concerned with an instrument new in business and law about which there are the most varied opinions both in theory and practice, and much room is left open for litigation. The literature on this field is sparse and the law courts are not well acquainted with its nature and meaning. The German courts, for this reason, have laid down no general and strict constructions. Just as in the United States, the banks of Germany are conscientiously endeavoring to standardize the practices of letter of credit operations by setting up uniform regulations. If this end is accomplished, there will result a moulding of a steady custom in the operation of the letters of credit in Germany, and also a capability on the part of the courts in litigation to assume the existence of standardized commercial usage. It would be fortunate if similar endeavors in other countries especially in the United States (compare the compilations in the Federal Reserve Bulletin 1921, pp. 158, 410, 681 and 926) would lead to a point where the bankers' associations of those nations chiefly interested in commercial credit transactions would come to a common agreement on the question of a universal regulation for letters of credit, and bring about a simplification of the system and the establishment of a world-wide custom in all credit matters.

THE GERMAN WORKS COUNCILS

BY EMIL FRANKEL*

IT is a far cry from the Russian Soviet Councils—organs of communistic, political, and economic control—to the German Works Councils with their rather limited economic functions centered in the work place. Yet that is the distant road the council idea traveled in Germany. At the overturn of the Imperial Government the revolutionary forces agitated for the establishment of a political council system fashioned after the Russian Soviet model and demanded a "determining voice in council" in the production process of the single establishment as well as in the national economic life.

The trade unionists and socialists who have taken over the governmental powers themselves, however, opposed the introduction of a political council system, and in a measure to satisfy the workers' second demand, promulgated an order for the introduction of works councils in all concerns having more than 20 employees, not to exercise larger political or economic control, but merely to guard the economic interests of the worker in his place of work. This clearly was not a realization of long slumbering ideas—to organize the revolutionary forces for action—ideas matured through years of teaching in the trade union and socialist movement, and agitation continued. After a series of severe labor disputes the government was finally led to declare that an extensive works councils system as representing the interests of the workers was to be recognized in the new constitution and measures for the creation of democratic labor laws and socialization were to be presented to the National Assembly. Fulfilling the first promise in this declaration the National Assembly accepted the works council idea in article 165 of the German Constitution which provides that the manual workers and salaried employees jointly with the employer, and having equal rights, are to participate in the regulation of wages and working conditions and in the general economic developments of the productive forces. In August 1919, the government officially published the proposed Works Council Law which, after a protracted and bitterly contested struggle between the employers' representatives and those of the workers, and under the influence of huge strikes and bloody demonstrations, was finally enacted into Law by the Reichstag in February 1920.

What are the main provisions of this law which is regarded by some as one of the first great socio-political laws of the new Germany, by others a puny socialization measure propped upon the strongly entrenched capitalist system? In practically every establishment including governmental offices having 20 or more employees there is to be a works council, and if there are both manual workers and salaried employees they are to have separate councils representing their special group interests besides the common works council. The functions of the works councils may be conveniently grouped:

1. To guard the workers' interests in the regulation of the working contract, viz.:

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Observance of the provisions of collective agreements, and where there are none to assist the management in conjunction with the trade unions in the regulation of wages and general working conditions; to see that decisions of the Board of Arbitration which have been accepted are carried out; to work out together with the employer work rules which are to govern the establishment.

2. To prevent disturbances from arising in the work place and when such have arisen to urge their orderly regulation, viz.: To see that a willingness for co-operation prevails among the workers themselves and between them and the management; to investigate complaints of the workers and seek a remedy for them; to call upon the Board of Arbitration if disputes cannot be settled through negotiations with the employer.

3. To assure the worker security and safety,viz.: To aid the management and factory inspectors in the fight against industrial accidents and harmful shop practices; to help accident or war-injured workers; to assist in the management and establishment of welfare institutions.

4. To exercise control in the hiring and dismissing of workers, viz: To work out together with the management principles guiding the employment of new workers, the works councils having the right of protest if in their opinion these principles have been violated; to hear the protest of discharged workers who have practically under all circumstances the right to protest, and finding the protest justified, to regulate the matter through negotiation with the employer, or failing in that, to call upon the Board of Arbitration; if there is a larger number of workers at one time to be taken on or laid off the employer must notify the works council a considerable time in advance of taking such action.

5. To participate in management, viz: To have the right to ask for information regarding the activities of the management touching the contractual relations of employer and employee (pay-rolls, etc.) regarding extent of production, and in specified establishments to be shown balance sheets and profit and loss accounts, and to delegate from one to two members in the Board of Directors, having the same rights and duties as the other members of the board.

While the enactment of the Works Council Law was the fulfilment of the demands of the large mass of the German workers the trade unions themselves were none too eager to accept it. The works council idea even met with some opposition on the part of labor leaders who saw in this new institution a possible rival of the trade union movement. They feared that the works councils of the single establishment with their membership belonging to different workers' organizations and some not belonging to any organization at all might be joined into an organization with the possibility of pursuing a policy of their own, independent of the trade union movement and which might even cross its policies. They also felt that there was danger in the syndicalist tendencies of the works councils to gain gradual control of industry through the single concern, an idea running counter to the socialization tenets of the regular trade unionist or socialist. To overcome the opposition of the trade union the law declares that the right of economic organizations of manual workers and salaried employees to represent the interests of their members is not to be infringed. And they are given a controlling influence over the affairs of the works councils, for representatives of trade unions, having advisory capacity, can be present at meetings of the works councils and at shop meetings. The works councils are the organs through which the provisions of collective agreements are carried out, and if there is no collective agreement the working conditions can only be regulated by the works councils in co-operation with the trade unions.

Since the Works Councils have been

instituted the trade unions have made every effort to bring them under their wing. Under the auspices of the German Federation of Labor a Central Office of Works Councils has been created. Works council leagues, with trade union officials as guiding spirits, are being organized by districts and industry groups. In the works councilor schools opened all over Germany instruction is given the workers from this standpoint of the movement. On every occasion the trade unions emphasize very strongly the fact that the works councils can have little power by themselves and that only by joining forces with the trade unions can a powerful economic factor be created. They think the time is not yet ripe for independent action on the part of the works councils and that the activities of the laboring masses for the time being and for some time to come must be concentrated in the trade union movement.

The works councils as an institution have finally been accepted by the more conservative trade unionists and socialists. But even the revolutionary socialists who think that the present works councils in no wise satisfy proletarian demands nevertheless consider them important advance posts in the class struggle, and a lukewarm participation or non-participation would in their belief be a decided mistake.

The problem which the trade unionists or socialists of whatever political hue as members of the works councils are facing is how to fulfill two almost irreconcilable functions—the one to control the powers of the employer and to extend the workers' voice in council, the other which requires them to actively co-operate in the production process. What in the minds of the workers are the prerequisites for co-operation, while of necessity they must accept the basic idea of the present production system, securing the largest profit with the least possible expenditure of raw materials, power, and labor? They must be given an insight into the production process and business management, which means that they must have knowledge of the general organization and financial condition of the establishment, of the conduct of the technical and business affairs, of the raw materials used, and of the production methods employed. This knowledge they intend to obtain from the works council's right to ask for information regarding production and business matters which will give them an inside view into the running affairs of the establishment and of the general conditions of the industry; the right to be shown balance sheets and profit and loss accounts will be a means of getting first-hand information regarding the financial conditions of the concern, and the right of representation on the Board of Directors will give them an opportunity to gain a real insight into the financial and managerial apparatus of the establishment.

It would be exceedingly interesting to determine what new position in the economic life the works councils have been able to secure for the German worker. But it is only a short period of two years since the law came into force and it is clearly too soon to attempt an exact evaluation. What is more, it would be obscured by the fact that the advances which the German workers have been able to make in the last two years have come not so much through the works councils but through collective agreements which the large and powerful labor organizations have been able to enforce. The trade unions themselves declare that the interests of the workers can be most effectively guarded and advanced through collective agreements and the

works councils thus become more of an instrument through which the provisions of these agreements may be carried out. The control which the workers are able to exercise in the establishment through the works council is dependent, therefore, largely upon the prevailing power of the trade unions, and with what power they may be able to back up the works councils. The workers are also aware of the fact that they must reckon with the power the employer may have, for under the Works Council Law the employers are also guaranteed certain rights which may be used by them as effective weapons. While, for example, the works councils are to advise the management, there is no provision in the law through which the employer may be forced to accept their advice; and while he is to furnish certain information he can refuse if he thinks production or business secrets are endangered thereby. The way the decisions arrived at jointly between the works councils and the employer are to be carried out depends on the management alone and the works councils have no right to interfere through orders of their own.

The German workers realize that the present Works Council Law is far from what they had wished it to be and that it has by no means given them a "determining voice in council." They are of the opinion, however, that the present Works Council Law if measured by the pre-revolutionary regulations governing the working contract, represents a great step in advance and secures for the worker a much more important position in the establishment than he has had up till now. Through the works councils a legal form of organization for the single establishment has been created which has been a means of making a unit out of the unconnected workers of a concern and given them an opportunity of making known their collective will. They feel that if the provisions of the law are interpreted by the works councils primarily in the workers' interests and if every advantage is taken in carrying out their functions as laid down in the law the sphere of the works council law itself can be measurably extended. Even limited participation of the representatives of the workers in the production and business management means fundamentally a break in the "Master in My Own House" idea. Having an equal voice in the regulation of the working conditions is designed to remove the undisputed will of the employer in the employment contract and to have the position of power more evenly balanced between employer and employee. Through the works councils the workers are given a chance to get right into the midst of the economic and social problems. They think that in the extent in which they gain knowledge they add to their power to exercise greater control in the affairs of the single establishment and to participate more fully in the settlement of the political and industrial problems of the nation.

THE PLACE OF ENGLISH STUDIES IN COMMERCIAL EDUCATION

BY JOHN DUNCAN SPAETH*

EDUCATION covers and includes all the processes by which the individual becomes capable of self-adjustment to the life of society, and conscious of the meaning and purpose of that life.

Out of the need of practical and usefully functioning adjustments to the varied and complex phases of modern society grows the demand for vocational education. In proportion as these processes are efficient they contribute to the usefulness of the individual and the prosperity of the social group. Commercial education is one of the more recent but nevertheless one of the most important fruits of the differentiation of vocational education in the interests of social efficiency.

But the aim of education is not only social adjustment, but social consciousness, the enrichment of the life and experience of the individual by vicarious participation in the life and experience of the race. In proportion as the processes that contribute to this enrichment function properly, they contribute to the happiness of the individual, and to the humanizing of the group mind. All the varied studies that come under the general head of humanistic or liberal, contribute to this end, and no vocational program can afford, in the interest of practical efficiency, to eliminate the influence of liberal culture. Vocational studies are like the food that is converted into muscular energy, and results in work. Liberal studies are like the oxygen that is converted by the lungs into the breath of life, without which the fires that produce energy and work would be choked and finally extinguished.

Finally, all educational processes use as their medium the acquisition of knowledge. When the chief stress is laid on the pursuit of knowledge for its own sake, without immediate reference to its practical utility, or its cultural fruitfulness, we have pure scholarship and pure science as a conscious educational aim.

Applying these concepts to the part that English studies play in the program of commercial education we get a threefold division.

1. The study of English as a vocational instrument.
2. The study of English as a liberalizing influence, and an introduction to the larger experience of the race and a participation in social heredity.
3. The study of English for its own sake: The inquiry into the origins of the language and the history of its literature.

The third division evidently belongs to the special student of English as a department of knowledge and does not concern us here, but the first two call for our consideration. I shall therefore discuss briefly:

1. The study of English as a vocational instrument in commercial education.
2. The study of English as a liberalizing influence in commercial education.

II

I see very little reason for differentiating sharply the teaching of English to students of commerce, from the teaching of English to any other group of

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vocational students. The difference is not between commercial English and engineering English, or chemical English, but between business English and literary English. Let me try to make clear the distinction I have in mind, by reminding you of the different uses of language. Language is used to influence action, to communicate information, to feed the imagination and stimulate emotions. To each of these uses corresponds a separate mood: The first is the imperative mood, the language of command, directed to the will, the military use of the language; to the second corresponds the indicative mood, the language of instruction addressed to the intellect, the scientific and educational use of language; and to the third corresponds the optative mood, the language of the creative faculty, addressed to the imagination and feelings, the artistic, poetic, and literary use of language. These three uses are rarely sharply and entirely separated, and in any work of creative literature they co-operate. But you will probably agree with me that in the "practical" as distinguished from the "literary" use of English, the imperative and indicative moods should predominate. It is the function of business English to be "businesslike," i.e., to issue orders, to state facts, to communicate decisions, to report actions. The chief ends, therefore, to be aimed at in business English are:

1. Objectivity in presentation of facts. The elimination of the personal, the subjective, the bias of wish, in short, the imaginative light "that never was on land or sea," which is the quintessence of poetry, has no place in a businesslike presentation of fact.

2. Accuracy of statement. Literature often produces its best effect by the creation of atmosphere. Business English requires clearness of definition, sharpness of outline, distinctness of detail.

3. Precision of form. "Repetition," "refrain," are poetic and oratorical devices. Business English must be compact, precise, concise.

4. Correctness. Correctness in conformity to accepted standards of usage. In business English there is no room for the play of idiosyncrasy of expression, the individuality of humor and flavor that is the charm of "style" in literary English. In literary English the personality of the writer is conveyed directly through voice or pen to reader or hearer. In business English, the stenographer, the typewriter, intervenes, and necessarily mechanizes and standardizes the product. Every successful business man is a "dictator" nowadays and I should like to make a plea for good dictators' English—the style of dictation which is different from the style of oral composition in solitude, or extempore composition before an audience, or literary composition in solitude with pen or typewriter. The business English of a good dictator will have the qualities above enumerated, and will be succinct, tending to brief compact sentences, rather than to elaborate and carefully balanced periods.

I should like at this point to introduce a plea for the study of Latin as a practical way of acquiring proficiency in business English. First on account of its training in the fundamental laws of syntax and grammatical structure. English grammar is one of the most difficult subjects. Latin grammar one of the easiest. Time now devoted to English grammar so-called, might well be devoted to Latin, and English grammar would profit. Instead of wasting the time of pupils in giving them metaphysical definitions of object and subject, transitive and intransitive verbs, dependent clauses, etc., teach them to recognize cases, tenses, moods, in the easiest way, i.e., by the external marks with which they are provided in the Latin language. In this way a sense for formative elements in language, without which there can be no feeling for grammar, will be developed at a great saving of time and energy.

Moreover, Latin should be studied as an introduction to word structure and word derivation in English. A good business man knows how to use the dictionary. A literary man carries his dictionary around in his head with him, and when he does not find the right word there, makes one, and the dictionaries have to incorporate it later. But the business man has recourse to his dictionary, and a thorough even though elementary grounding in Latin doubles and triples the value of the dictionary. Everybody who uses a dictionary studies Latin without knowing it. He might as well know he is doing it, and do it right and do it efficiently. A knowledge of 500–1000 Latin words and their derivatives is the best business investment in English a business man can make. It is one of the greatest time-savers ever invented. If you could be guaranteed a 10 per cent interest during your lifetime on any investment and return of the capital to its source at your death, you would consider it a good business venture. The acquisition of a moderate Latin vocabulary will mean a return of 50 per cent on your investment, as long as you use English, and a return of the capital to its source at your death. It is the best form of language insurance I know, for whenever you have forgotten how to spell a word, or forgotten what it means, you can reconstruct it out of your Latin insurance policy.

With all the stress laid in these days on the acquisition of French and Spanish and Italian for business purposes, it ought to be borne in mind that the Latin you have learned for purposes of English insurance can be directly invested in French and Spanish consols. He who knows Latin knows French and Spanish and Italian at their source. He still has some distance to travel, but it is *down stream*, with the current. Italian, Spanish, French, are all modern currencies of ancient Latin coin, and when you can kill three birds with one stone, and still use the stone to flavor your bird-pie, why refuse to pick up the stone because it is hard!

III

The function of education, as before stated, is not only to render individuals capable of self-adjustment to the life of society, and therefore socially useful, but capable of becoming conscious of the purpose and meaning of that life and therefore socially creative and constructive. Literature, as embodying the memorable experience of the race in memorable language, is the chief instrument in the development of this social consciousness. The "Humanities" build bridges from the island of self to the continent of humanity. No man can be *humanized* without being *socialized*, and therefore there is no permanent conflict between the social-economic content of literature and the humanistic content, and no special literature for students of commerce. The conflict here is not between literature for bachelors of business and literature for bachelors of art, but between the *literature of antiquity* and *literature of the present*.

There is not sufficient time to develop fully this mooted subject, but I would like to suggest a few guiding principles which I have found helpful in my own thinking about the subject. In all literature there are two elements.

1. Representation of life.
2. Interpretation or valuation of life.

The value of the "classics" is chiefly in valuation and interpretation, and therefore in deepening our experience. The value of modern literature with its social-economic content is chiefly in representation, and therefore is en-

larging and enriching our experience. H. G. Wells is rich in representation, but not profound in valuation. Plato is profound in valuation, but remote in the life represented. A classic represents permanent phases of human experience with a permanent valuation.

The business man, it seems to me, can ill afford to deprive himself of the perspective, the sense of values, the insight into fundamental and permanent laws of human nature that reward the reader and lover of "mere literature." We hear much in these days of the psychology of salesmanship: That is only another name for the ability to understand and reach human motives, the ability to penetrate to the deeper levels of human nature, where desire, will, reason, passion, conscience, meet in the centers of personality. To persuade another to take what you offer, to buy what you want to sell to him, is in many instances nothing but bearing him down by the weight of your superior urgency. When the transaction is completed, and a legal and contractual obligation compels your victim to take what he no longer wants, and keep what he no longer desires, the resultant reaction will probably frustrate a second attempt on your part to make him take what you want to get rid of. But if you can succeed in penetrating to that deeper region of which I spoke, if you can make him *want* what you offer or can produce, then you have fundamentally modified his personality, and influenced his nature, and as soon as he has used up what you have really made him want, he will wish to be supplied again, and you have the foundation of a permanent market, and can reduce your overhead in advertising and the time devoted to "inducing" buyers. So that even from this practical point of view the study of the literature of human nature is, if not a prerequisite, at least an admirable and useful introduction to the psychology of salesmanship. The late Senator Quay of Pennsylvania, one of the most astute and successful manipulators of men, often said that he had learned as much about the art, not the science, mark you—but the art of politics in his library as in the caucus and the convention. And his library shelves, especially those containing his Horace collection were a delight to all connoisseurs of books. I know a successful banker in Baltimore who on his way to business every morning prefers a page of Greek Tragedy to the morning newspaper. Every one of you with wide acquaintance among successful men of affairs in a large way, could adduce similar examples.

But it is the humanizing influence of literature, especially that "classic" literature that represents what is permanently noble in life, that I have especially in mind at the present moment. Some one has said that books may be divided into two classes: Books made out of other books, and books out of which other books are made. It is the latter that constitute "The Literature of Power" of which De Quincy wrote. Any program of commercial education that would cut off the coming generation of specially trained business men from acquaintance with such books, on the ground that they constitute "mere literature," will itself be open to the charge of having lowered itself to "mere commercialism." For even after you have successfully devoted your life to business there will remain the more difficult problem of relating your business to life.

TALK BUSINESS!

BY T. B. HILTON*

WHAT makes the "busy business man" busy?

Easy to answer, you say. He has so many responsibilities.

You are wrong. Ninety-nine per cent of them could do twice as much in the same amount of time if it were not for one great handicap—useless conversation.

Talk permeates the structure of American business life as thickly as bees in a hive. Everybody talks all the time, from the smart-Alec office boy and Spearmint-chewing stenographer on up to the pompous graybeards around the directors' mahogany table.

We used to think we Americans were hard workers. Other nationals told us so and we believed them. Saying so got to be a habit and we continued it. Stop to analyze a while and see if it is true in your organization.

The vice-president runs into your office to tell you how the deal in Oshkosh is progressing—and stays to tell you in more intimate detail about the dollar limit he played the night before.

The treasurer spends five minutes telling you last month's collections were off—and twenty minutes telling about a bridge party out at his house.

The secretary hands you the minutes of the last directors' meeting—and tells you the cute thing his youngster said last Sunday.

A machinery salesman spends fifteen minutes discussing his product and twice as long arguing with you about the effect of the coming Genoa conference on the price of oranges; and everything he says you had read at home in your favorite weekly.

A customer comes in and discusses weather, golf, disarmament, and the agricultural "block" before he mentions business. You wind up by taking him to lunch and you tell each other how business takes all your time, but in reality you worked but an hour out of the whole morning and spent the rest of the time in idle talk.

"But," you argue, "I can't help that. You would do away with all the little niceties of business and the wheels of progress would revolve more slowly."

Not at all. "The voice with the smile wins" whether it is talking business or "pleasure." Speaking of pleasure, where can you get more of it than in business when things are breaking right? What is so surely calculated to make things break right as hard, continuous work?

Once in a while some one comes in pleasantly, briskly, dignifiedly and, without the usual banal preliminaries, tells you what he wants and why, gets it or learns why he cannot have it, and is gone almost before you realize there has been an interruption to your routine.

That type always leaves a good impression on you. You usually remember him gratefully and when he comes back you are apt to grant him an interview when you are turning the windjammers down. Others will feel the same cordiality toward you if you teach yourself to be a time-saver.

The fact that these methods do not develop so many personal friendships as the "how-is-your-golf-score" kind is no argument against them. They en-

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able you to accomplish more in a given time and have greater leisure for the friends you already have "grappled to thy soul with hooks of steel."

Do a little research among your employees and you will be surprised to learn how many of them resent the time lost on account of executives' useless talk. A sales manager recently worked a great reform in one organization. He was a good man and they wanted to keep him but he signed up with a competitor. "One of the chief reasons I started to look for another connection," he told his old firm, "was that you people wasted a quarter of my time in useless talk. I've got a lot of work to do before I reach the pinnacle of success and I haven't time to sit around to listen to a lot of non-productive pleasantries." The executives gasped, sat up, took notice—and there is a more old-fashioned businesslike air around that office now.

All of us who are forced by circumstances to sit in conferences have resented time and again the unpreparedness of those who attend. They all knew in a general way what the conference was going to be about, but it is quite apparent by their manner and uncertain speech that they postponed their thinking until the meeting was called to order. One by one they present their half-baked views until some-one finally hits on a happy suggestion and the problem is solved. The same amount of effort devoted to thought on the way home the night before would have saved all that talk.

In the organizations where conferences are gatherings for passing on ideas rather than thinking about them the talker-to-little-purpose quickly discovers he is in an untoward atmosphere and cuts out his time-consuming.

You can develop the same brand of efficiency in your organization. All that is necessary to reach the desired goal is determination on your part to lead all conversation tactfully but firmly along the line of business progress. You do not have to rupture any friendships. The man who interrupts a purposeful interview to tell a story will get the hint if, before the sound of his voice had died away, you are again running the interview or meeting on the main track. Those who come into immediate contact with you will follow suit shortly and before you know it the entire force will be permeated with greater force and directness. There will be less night work, fewer desks piled high with unfinished work, more customers pleased with the service—and you will have more time in which to try to work the same scheme at home—if you have the inclination and the nerve.

PERSONAL RELATIONS IN SCIENTIFIC MANAGEMENT

BY M. O. TRUESDALE *

WHILE every technical device is employed in the Cloth-Craft Shops of the Joseph and Feiss Company of Cleveland for the welfare and efficiency of the employees, its chief claim for distinction in the industrial world arises from the spirit of co-operation between the workers and the management. The purpose of the organization is to correlate human effort for mutual accomplishment. It is the function of the management to develop equipment and methods only as a means to that greater accomplishment which can be obtained alone through harmonious and co-ordinated human effort. Human relationships, therefore, are recognized by the executives of the Joseph and Feiss Company as the main problem of management.

They have succeeded in establishing such harmonious and satisfactory relations with their employees that a strike is unknown; and the labor turnover has been reduced to a minimum. This has been accomplished by the making of scientific management, not a system or method by which to get work done faster and cheaper, but a science and philosophy to harmonize the relation between the operatives and the management which involves the assumption of full responsibility on the part of the management for the education of foremen and employees.

"Whether or not management has at its service modern equipment or a separately functionalized department, it must concern itself chiefly with the establishment and development of a personal relationship that will lead to a progressively better understanding between management and men. For this purpose it is not only essential that uniform methods for developing and dealing with men be established, but also that such methods take into consideration the recognized principles of the human sciences and specific factors entering into each individual case. In order to develop an organization to the greatest efficiency each individual must be educated and developed to the fullest possible extent. This involves on the part of the management close personal contact with every member of the organization in order that his personal traits and abilities may be studied and developed. On the part of the worker opportunity for personal contact with the management is essential, not only for this reason but to insure uniform and substantial justice. Mutual understanding is a prime necessity and it is a basic function of management to create proper understanding. For this purpose a systematic personal relationship based upon direct and continuous personal contact is absolutely essential. Such relationship alone permits of real democracy in industry."

Democracy in industry is not only essential to a homogeneous and harmonious organization, but is one of its objects. Although the particular form of organization may be undemocratic, the form itself is no criterion of democracy. Of two organizations following the same form of administration,

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EDITOR'S NOTE: This article is based upon a personal visit to the plant of the Joseph and Feiss Company and upon an interview with executives whose language is often quoted. It has been read and approved by Richard Feiss and by Mary B. Gilson, Superintendent of the Employment and Service Department.

one may be democratic and one autocratic in fact.

One of the essentials to democracy is free expression. It is not enough, however, that expression be free, but it is essential as well that those in positions of leadership recognize and encourage such expression among all members of the organization. Although the responsibility of this education rests upon the leaders, it is essential that the responsibility to the organization be felt by all before any real democracy can exist. An organization cannot be considered thoroughly democratic where there is a distinct division between workers and executives. A democracy exists only where there is a universal democracy. There must be compliance by all, not with the whims and wishes of an individual or a group of individuals, but with those true principles and standards of action which must govern all alike.

"Proper leadership for the purpose of direction and education is most essential to a democracy. On the other hand, it is necessary that all the members of a democratic organization be brought to realize more and more their responsibility and the confidence that must be placed in true leadership in order that true leadership can accomplish its purpose. The lack of confidence in leadership is not only a serious problem in business organizations, but it is one with which the entire American democracy is still struggling and which it has to solve before its institutions and all that it holds dear can be thoroughly Americanized. In this connection the problem is not primarily one of Americanizing the foreigner, but of Americanizing the American."

The factory of Joseph and Feiss is run by executives on a little different principle from the ordinary factory. Just as every business takes an inventory of its stock of materials, they take an inventory of men and women and endeavor to develop morale—the spirit of an organization—and find the best means for maintaining that spirit.

The important thing in this connection is the idea of functionalizing. Mr. Feiss's idea is that orders do not amount to much. Instructions are the essential thing. The executives of Joseph and Feiss, therefore, issue no orders and permit none to be issued. However, instructions are considered very carefully. The worker in entering the factory comes in contact first with those in the employment department. The hiring of employees is considered very important. Thus instead of leaving the hiring, firing, and promotion to 40 different foremen with 40 different standards and all manner of prejudices and favoritism, a single department—the employment and service department—with a single standard for all workers supervises the relationship between the company and its employees. An open channel through their own elected representative provides a means for hearing complaints.

This department is responsible, not only for hiring employees, but also for keeping them on the job, seeing that they are properly instructed, and that they themselves learn the responsibility that every member owes to every other in the organization. No one can be dropped from the pay-roll without the O K of the employment department and the shop representative. No one can be disciplined in the narrow sense of the word except by the employment and service department and the shop representative, insuring equal treatment. Even the executive management cannot discharge any one without first receiving the O K of the employment and service department.

"We also think of our employment

and service department as a department for the discovery of grievances. Their adjustment is the least important thing, their discovery is the important thing, for an individual grievance may delay production all down the line and result in absenteeism and labor turnover. Thus the employment and service department is fundamentally and vitally connected with the whole plant. It is a part of the fabric, not a department grafted on. It is part of the responsibility assumed by the management. Through it we first hire our employees with great care and then watch their physical condition as well as their output.

"We have always felt that a welfare, or as we prefer to call it a service department cannot take the place of wages. It is to stimulate increased efficiency and give to this greater efficiency the increased reward in wages to which it is entitled. It is to this end that we studied and carefully standardized our work which is all done on the piece-work plan. Our employees understand our standards of accomplishment, but we face the ever existing responsibility of training them and helping them to reach these standards. We recognize the dependence of an adequate pay envelope on the *earning ability* of the individual and not merely on the rates of pay established by an organization. *Earning ability*, it is obvious, depends upon good health, intelligent understanding, and a co-operative attitude, and it is the duty of the employment and service department to aim toward developing all these qualities in both executives and operatives."

In hiring employees the department tries to select the right man for the right job. When an applicant is chosen from the file to fill a position in the organization, he is notified to come in at a specified time. The first procedure consists of eye, dental, and physical examinations. A careful record of these examinations is kept in such form that all further data concerning the health of the employee may be entered on the same sheet.

In the preliminary interview the superintendent of the employment and service department talks to the applicant upon the responsibilities of the organization toward the worker, regularity of employment, policies and method of co-operation, and the responsibility of the worker toward the organization.

After this interview the superintendent of instruction is notified to bring to the service department an instructor, and the employee is introduced to him with the explanation that the chief duty of the instructor is to help him to form the correct habits of work, such as proper handling of material, elimination of waste motion, and other things essential to speed and greater earning power. The instructor then helps the employee select his seat in the lunchroom, his locker, etc., afterward taking him to his place of work where he meets the production and quality foreman, and instruction in the operation assigned is given. At lunch time the instructor sees that the employee meets the person at the head of the table where he is to eat, and it is the latter's duty to see that he becomes acquainted with the other people at the table. The head of the employment division of the service department follows closely the progress of the new worker during the days he is learning his new job.

The superintendent of the employment and service department has a "group meeting" every Wednesday morning with those employed during the previous week. At this meeting she covers the policies and aims of the organization and asks for the co-opera-

tion of each and every member of the group in carrying them out.

The primary objects of the interviews of the employment and service department are not only to give information, but to establish friendly contacts. We aim to impress the worker with the fact that there are people in the organization who are definitely and vitally interested in him as a human being, and that our services are at his command if we can do anything to help him to secure steady and good earnings and to further the development of himself and his family.

A valuable means of contact with the individual workers is furnished by the daily absence report. Every absentee is visited in his home by a worker from the service department and countless are the opportunities thus gained for securing the good feeling and understanding of the home folks, who are only too often inclined to make matters worse by ill-timed sympathy or positive antagonism due to lack of understanding.

"It is now so thoroughly accepted in the clothcraft shops that discipline and discharge are functions of the service departments and the works council that both foreman and operatives bring their disputes to the department as a matter of course. It is our policy in cases of all complaints to hear the worker's side first and then to call in the foreman or superintendent or fellow worker and have a clear understanding on both sides before attempting to do any bridging. There is no wrong psychology permitted in the clothcraft shops which arises from the fallacy that the 'divine right' of firing means prestige and dignity.

"It is our aim to have every foreman and every superintendent in our organization realize that his function is an educational one. For the training of foremen we offer an apprenticeship course consisting among other things of instruction in every operation in the factory. College graduates as well as others have availed themselves of this course with the understanding that they are to have no privileges nor favors extended them, but are to 'start scratch' and share the common lot. Our apprentices are frequently sent in groups to visit factories belonging to other and similar industries. On their return a general discussion follows which we feel helps to give them an insight into methods of training employees who are under them."

Other normal means of contact with employees are furnished by the library, the bank, the dispensary, English, and other educational classes and by games, dancing and singing at noon time. These activities often furnish the most valuable means of determining the fitness for advancement to positions of responsibility.

"We can see the person who is the natural leader assuming responsibility in starting the noon-hour games, in managing the shop parties, or in some other activity outside of working hours. This assumption of responsibility is an evidence of qualities required in supervisory positions."

Games, dancing, a choral club, parties, a dramatic club which gives frequent entertainments—all these and other activities, moreover, furnish a splendid method of demonstrating the real funand real value of team-play.

The Joseph and Feiss Company have found that if a cafeteria is to prove satisfactory to workers, they must share the responsibility for its management. Our cafeteria joint committee consists of representatives of the operatives, foremen, and service department. They make suggestions

about menus, service, and other dining-room problems. The financial responsibility is important. All profits from the cafeteria go to the treasury of the operatives' association. If there is a loss they must meet it. Of course, the cafeteria makes no payment for rent, fuel, or light. That is the firms' investment. But the cafeteria must pay the cost of food, incidental supplies, and service.

Early in the spring of 1919 the Clothcraft Operatives' Association was organized in its present form. This association consists of operatives in all departments—machine operators, pressers, examiners, hand-sewers, route clerks, office clerks, machine adjusters, etc. The association elects from the various divisions representatives who constitute what is known as the operatives' council. There is also a management council, consisting of managers and superintendents, and a foremen's council, consisting of foremen and supervisors in all departments. Through joint committees, through executive boards, and through general meetings matters affecting the common interest are discussed openly and freely.

An executive representative is elected by the executive board of the operatives' council and is relieved of all duties as an operative. This gives him the opportunity to devote his entire time to the interests of his fellow workers. He is paid an amount equal to his earnings as an operative out of the dues which the members of the association pay into their treasury. His term of office is one year.

The general purpose of the Clothcraft Operatives' Association, as stated in its constitution, is: "To secure for the operatives a proper share of the management in matters affecting their interest and to establish better means of assuming the responsibility involved; to advance and safeguard the collective and individual interests of the operatives; to promote proper relationship between operatives and executives and between operatives and management." The specific purposes are concerned with "justice," "efficiency," "social and team spirit," "educational and other personal development," and "the spirit of democracy in the organization."

When the operatives wish to register a complaint or suggestion about noon-time activities, style of chairs, steam in the pressing-room, or classification and rate of an operation, their council makes a written recommendation to the foremen's council and the management, which approves or disapproves of the measure. When matters are rejected they remain in *status quo* unless the originating body embodies the suggestions and presents the matter anew.

The operatives' council must pass on all general instructions or standard practice which concerns the operatives. When the management suggested paying vacation bonuses after instead of before vacation, the operatives' council by a two-thirds vote vetoed the measure. As a result all the workers get their vacation money before they leave for their holiday. The vote of the council is binding on all members of the operatives' association unless a referendum is taken.

While the councils deal with group matters, the employees' representative deals with matters affecting individual employees. He knows the methods of the time-study, the assignment and the pay-roll divisions, so that if an operative is dissatisfied with his earnings or the production standard on an operation, the representative can detect the cause of the dissatisfaction and aid in settling the difficulty. The representative is a member of all committees directly or indirectly affecting opera-

tives, and has a voice in the decision of the committees, and the right to bring cases for review or further explanation if satisfied that any operative is justly dissatisfied with a decision.

These joint committees, composed of representatives of all three groups, accomplish much in establishing a clearer understanding of shop problems and in working out "rules of the game," which mean better co-operation and better teamwork.

The management of Joseph and Feiss found that any inequalities in pay among their own workers rankled even more than the fact of larger pay on certain operations elsewhere, and so, basing their procedure upon carefully worked-out scales of average production, they decided to give a 20 per cent "production bonus" to every worker who meets the standard. At the present time over 70 per cent of the workers are making the production bonus regularly.

There is also a "quality bonus." For each kind of work there is determined a maximum number of rejections to be allowed the worker, the number depending upon the speed and kind of operation. If the worker exceeds this schedule, that is, falls below the standard of quality required, he is paid no quality bonus. If he reaches or passes the standard he is paid a bonus up to 10 per cent of his earnings for perfect performance. He need not maintain the standard continuously to earn a bonus—but the bonus is based on his average for the working day.

An "attendance bonus" invokes regularity and helps to keep the productive machinery balanced. For each unbroken consecutive day of work the worker gets a bonus of 50 cents. For each absence' he fails to make the 50 cents attendance bonus for the first day following the absence. Thus a worker earns 50 cents a day before he starts to work if he is present at the beginning of the working day.

To provide for old age, and in place of a pension a "service bonus" is given. For each year of service the worker gets a bonus of 5 cents a day, up to 30 years of service, beyond which time the rate does not increase although the payment continues. But this bonus is not to be wasted, and the company reserves the right to deposit the bonus, agreeing to turn over the bankbook when the employee leaves the service. It is intended to encourage thrift.

There is still another bonus. Realizing that time will often adjust personal difficulties and prevent an employee's leaving an organization, a bonus of a day's pay for each week of notice up to six weeks is given. This also allows the firm time to train someone else in the work. In connection with training it may be mentioned that one of the principles of the Joseph and Feiss organization is to have every worker familiar with several operations. This scheme makes possible the balancing of all departments so that the flow of work is continuous and regular in quantity, making the replacement of quitters and absentees less disturbing to the maintenance of production.

"We feel," said Mr. Feiss, "that the object of all follow-up and service work in our factory is primarily for the purpose of developing men and women. More and more we are coming to realize that the justification of industry lies in the opportunity it offers to men and women to attain not only material, but mental, moral, and spiritual advancement. And this cannot be secured unless the confidence of the worker is attained, unless he develops the right mental attitude toward the organization for which he is working."

STOCK RIGHTS — WHAT THEY REALLY ARE

BY THOMAS YORK *

IN undertaking to raise fresh capital corporations not infrequently appeal to their stockholders, and the appeal usually takes the form of an offering of additional stock at a price below the prevailing market quotation of the outstanding shares. This privilege of subscribing, which must be accorded to the stockholders if the new issue is to carry voting power, has value as long as the market price of the old stock remains above the subscription price of the new; and if the stockholders prefer not to exercise the rights attaching to their share holdings, they are at liberty to sell them in the market for whatever they will bring.

In a recent decision the Federal District Court of Maryland held that the gross proceeds from the sale of stockholders' rights to subscribe for stock at less than the current market price do not constitute income and are, therefore, not taxable. The action was brought against the local collector for the annulment of the Internal Revenue Bureau's regulation that stock rights were subject to the tax as income. The Internal Revenue Commissioner, however, has not seen fit to rescind the regulation, but is waiting for the United States Supreme Court, to which the case has been appealed, to hand down its decision.

The Bureau's ruling serves to illustrate a very common misconception concerning stock rights. The Bureau has merely followed the very widespread but erroneous notion that stock rights are an extra dividend or a bonus. Few investors, indeed, have any realization of the real nature of their action and its relative advantage to them when they either subscribe for the new stock offered them, or decline to subscribe and sell their rights. Even many corporation officials are at a loss to understand stock rights, finding them particularly puzzling when called upon to fix the subscription price of a new issue. Should they set the price at par, or above, and how far above, and what effect will either action have on the company's financial position and the shareholders' interests?

The general failure to understand what stock rights fundamentally are is probably due for the most part to ignorance of how the value of the rights is established in the market and the relationship in which that value tends to stand to the current price of the stock. It will, therefore, be necessary to discuss first, at some length, this matter of market dealings in the rights. For this purpose a simple hypothetical case will be taken, one in which the privileges of subscribing to common stock is extended only to common stockholders. This is the particular type of privileged subscription involved in the issue now before the Supreme Court. Lack of space forbids consideration of the other types, with regard to the basic nature of which somewhat different conclusions are to be arrived at.

The company taken for the purposes of our example has a capital stock of $1,000,000, divided into 10,000 common shares, each therefore of $100 par

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value. The entire amount is outstanding and the market quotation is well above par. Finding that $500,000 of additional capital is needed, the directors decide to offer to the stockholders 5000 shares of new common stock at par. They accordingly announce, say, on July 1, that stockholders of record, August 1, will have the privilege of subscribing for the new issue in the proportion of one share of new stock for every two shares of the old held on the latter date. The subscriptions are payable on or before September 1, following, and transferable warrants for the rights are to be issued as soon as practicable after August 1.

According to the conditions of this offer every holder of two of the old shares at the close of business on August 1, will be entitled to subscribe to one of the new shares. He will, therefore, come into possession of two rights, as that term is used on the New York Stock Exchange, or one for every old share he will own. These he will be at liberty to dispose of in the market, if he should not care to make the subscription.

Market dealings in the rights will presumably commence with the declaration of the subscription privilege on July 1, and will continue until the expiration period on September 1. Up to a day or two after August 1, the trading will be conducted on a "when issued" basis; that is, the contracts will stipulate delivery and payment for the rights when the warrants are available. Meanwhile the stock will be dealt in "rights on," as it is commonly expressed, meaning that the market value of the shares will include the value of the prospective rights. With the issuance of the warrants and until September 1, trading in the rights will be for immediate delivery and payment, or rather for delivery and payment the day after the execution of the sale, in accordance with the prevailing method of settlement followed on the New York Stock Exchange, which applies to securities in general. During this second stage of trading in the rights, the stock will sell "ex-rights," its price no longer including the value of the rights. The rights become separated from the stock on August 1, and thereafter they can be acquired only by independent purchase, apart from any transactions in the stock.

Let us consider first the relation which the market price of the rights tends to maintain to the current price of the stock during the first stage of trading in them, from July 1 to August 1, when they are sold "when issued" and the stock is quoted "rights on." We shall take the instance of one who on July 1, the date of the announcement of the subscription offer, purchases two shares of stock at $150. He becomes a registered owner of the stock, and if he keeps it until August 1, he will receive a warrant for two rights, entitling him to subscribe for one new share. Assuming that he will exercise his privilege, he will be the owner of three shares on September 1, which will have cost him a total of $400, or an average of $133⅓ per share.

Suppose, however, that instead of using the rights himself he sells them on July 1, for delivery and payment a few days after August 1, at a price equal to the difference between $150, the price he has paid for his stock, and $133⅓, the average cost per share of the old and the new stock combined if he should subscribe for the one new share himself; that is to say, suppose he sells his two prospective rights for exactly $16⅔ a right. The net cost of the stock he has purchased is in that event $133⅓ a share. He thus fares no differently in this case than he

would if he subscribed for one new share.

This comparison of the relative advantage of the two methods of disposing of the rights makes it evident that on July 1, when the stock is quoted \$150 and the rights \$16⅔, the two are at parity with each other, in the sense that with those quotations prevailing it is immaterial whether one purchases two shares of stock and subsequently subscribes for one new share, or whether he purchases six rights and secures three shares solely by subscription. The cost per share in either case will be \$133⅓ as of September 1, as shown by the following:

According to the first method:	
Two old shares purchased at \$150 cost	\$300
The subscription price of one new share will be	100
The total cost of the three shares will be	\$400
The average cost of one share will be	\$133⅓
According to the second method:	
The cost of six rights purchased at \$16⅔ is	\$100
The subscription price of three new shares will be	\$300
The total cost of the three shares will be	\$400
The average cost of one share will be	\$133⅓

There are certain minor factors omitted from this comparison which in practice cannot be so ignored. Allowance, in the first place, should be made for the variation in the dates at which the several payments are made. This is usually done by reducing the payments to a common basis by means of interest adjustments. The final date on which the subscription payment is due is taken and interest to that date is added to all other previous payments. Account must also be taken of the broker's commissions, and if the subscription price is payable in several instalments spread over a number of months, dividends to be received on the old stock during this period and any interest the issuing company may grant on all but the last instalment must likewise be considered. These, however, are items which are not of sufficient importance for the purposes of this article to deserve more than passing notice.

A little study of the relationship of the parity value of the rights to the price of the stock in the above example will enable us to derive the general rule for ascertaining their parity value when the stock is selling "rights on." It will be noticed that the difference of \$50 between the market price of the old stock and the subscription price of the new is three times the parity value of \$16⅔ for the rights. Hence the parity value is equal to this difference divided by 3, which divisor, it will be observed, is the sum of the terms of the subscription ratio, 1 and 2. It only requires a little experimenting to see that this is a rule of general application, holding true whatever the market price of the stock, the subscription price, and the subscription ratio may be, provided that in every case the ratio is given in terms of the number of old shares required to subscribe for one new share. The rule may, therefore, be stated thus: The parity value of stock rights when the stock is selling "rights on" is equal to the difference between the current quotation for the old stock and the subscription price for the new, divided by the sum of the terms of the subscription ratio when those terms have reference to the number of old shares necessary to subscribe for one new share. Expressed in mathematical form the rule is as follows: If P represents the parity

value of the rights, M the market price of the old stock, S the subscription price of the new stock, and N the number of old shares entitled to subscribe for one new share, then

$$P=\frac{M-S}{N+1}.$$

It can be seen by merely glancing at this formula that the parity value of rights must needs move up and down with the current price of the stock. If the stock advances, for example, to \$155, the parity value of the rights advances to $\frac{155-100}{2+1}$, or \$18⅓. And if the stock price declines, say, to \$145, the parity value of the rights declines to $\frac{145-100}{2+1}$, or \$15.

As for the actual market price of the rights, this exhibits a constant tendency to equal their parity value, and therefore, also fluctuates with the market price of the stock; for whenever any appreciable divergence is shown between the parity value and the market price of the rights, it becomes profitable to undertake certain market operations in the rights and the stock, the effect of which is to cause the two to draw to a relationship of parity equivalence, or as otherwise expressed, to make the market price and the parity value coincide. These operations are of three kinds and are illustrated in the following examples:

1. Suppose that when the price of the stock is \$150 and the parity value of the rights is consequently \$16⅔, the market price of the rights is \$15, or at a discount of \$1⅔ from the parity value. Rights are then relatively cheaper than the old stock, and those who wish to acquire shares in the company will do better to purchase rights and subscribe for the new shares than to purchase old shares in the market, as is evident from the following:

(a) When the old stock is purchased:

Cost of two old shares at \$150	\$300
Subscription price of one new share..................	100
Cost of the three shares.....	\$400
Average cost of one share...	\$133⅓

(b) When rights are purchased:

Cost of six rights at \$15.....	\$ 90
Subscription of three new shares..................	300
Total cost of the three shares	\$390
Cost of one share..........	\$130

These two computations show that the method of securing stock by purchasing rights and subscribing for the new shares is cheaper by \$3⅓ per share, or twice the discount from parity at which the rights are quoted. It is of no consequence that in the first case two old and one new share, and in the other case three new shares are acquired, since the new stock will in all respects be on the same footing with the old.

2. With the market price of the rights quoted at a discount from parity a profit accrues to owners of the old stock who sell and at the same time purchase the number of rights necessary to subscribe for a like amount of new stock, thus:

Proceeds from sale of two old shares at \$150............		\$300
Value of the rights attaching to the two shares.........		30
Amount realized on the stock exclusive of the rights......		\$270
Cost of four rights at \$15.	\$60	
Subscription price of two shares..............	200	
Total cost of the two new shares..................		260
Profit on the two shares turned over..................		\$10
Profit on one share..........		\$5

The market value of the rights is deducted from the proceeds of the sale of the old shares because the proper basis for computing the profit is to take the old

shares as they will be after August 1, when they will have shed the value of the rights and be on the same plane with the new shares. As will appear later in this article, the sale of the rights constitutes a liquidation of part of the stockholders' investment and the total proceeds cannot, therefore, be taken as profit.

3. The disparity between the market price for the stock and that for the rights also gives brokers opportunity to perform arbitraging transactions, which consist of the following three steps:

1. Selling the old stock "short," the seller borrowing the stock to make delivery.
2. Buying rights and subscribing for the new stock.
3. Turning this stock with the same number of rights over to the lender of the old stock.

The following table indicates the method of computing the arbitrageur's profit:

Proceeds of "short" sale of two old shares at $150		$300
Cost of six rights at $15	$90	
Subscription price of two new shares	200	
Total cost of two new shares		290
Total profit on the two shares turned over		$10
The profit on one share		$5

It will be noticed that the broker purchases two rights more than the four he requires to make the subscription for two shares of new stock. These extra rights he delivers, after the stock sells ex-rights and the warrants are issued, to the one of whom he borrowed stock for the purposes of making delivery on his "short" sale. He borrowed two shares which included the rights, and he returns their equivalent in the shape of two rights and two shares of the new stock, the latter of which he delivers after September 1, when he receives the certificate.

The foregoing three classes of operations, occasioned as they are by the presence of disparity between the market quotations for the stock and the rights, tend in turn to affect those quotations so as to reduce the disparity, if not to eliminate it entirely; readjustment in the demand and the supply of the stock and the rights takes place in consequence of them. The demand for the rights is increased, while the offerings of the stock are augmented. The result is a rise in the market price of the rights above $15 and a fall in the market price of the stock below $150; and with that the two quotations are drawn to a mutual parity basis, which is reached when, for example, the stock is quoted $148 and the rights $16 ($148 minus $100, divided by 3, equals $16).

This parity tendency of the rights is always in operation, though it is not always visible, as it may be temporarily influenced by contrary market influences. At any given moment one or the other set of opposing influences may have the ascendency; but as any widening of the existing disparity, that is, any widening of the margin between the parity and the market values of the rights, only serves to increase the possible profit to be derived from the transactions described above, stockholders and arbitraging brokers are stimulated to greater activity to make the most of it. The movement away from parity cannot, therefore, proceed very far before being arrested, and eventually it gives way to a movement toward parity.

Almost invariably any disparity between the stock and the rights is one in which the rights are at a discount from their parity value of the moment. The reason for this is plain. When the privilege of subscribing to additional stock is extended to shareholders, many of them sell instead of exercising their rights. This in turn, through

the operations of those who take advantage of the disparity to effect a saving or reap a profit, reacts on the price of the stock, causing it to fall also, though not necessarily, as parity may be restored simply by the market price of the rights advancing.

Instances of the opposite disparity, in which the market price of the rights is at a premium above the parity value, are extremely rare. Perhaps the most notable case in recent years of this sort of disparity was that in the sale of rights to a new issue of Texas Company stock offered in 1915. At one time stockholders stood to save as much as $6.50 per share by buying the old stock and selling the rights in lieu of subscribing for the new stock. The opportunity was seized by many, and the rise in the stock and the fall in the rights that followed eventually brought about a more normal relationship between the two quotations.

It is rather interesting to note that on these very rare occasions when rights are quoted above their parity value, it is impossible to arbitrage by purchasing the stock and selling rights "short" unless the buyer of the rights will accept, in lieu of them, the old stock selling ex-rights, and pay for it the price of the rights and the new stock. If he proposes to exercise the rights, there is no reason why he should not agree to such a settlement, since the old shares will in every respect be as good as the new. He may not be altogether certain, however, that he shall not want to resell the rights, and in that case he will refuse to accept the old stock. Because of the risk of meeting with such refusal, brokers are reluctant to undertake arbitrages involving the "short" sale of rights.

With the arrival of August 1, the day on which stockholders of record become entitled to subscribe for the new stock, the second of the two stages into which the period of trading in the rights is divided begins. The outstanding stock now no longer carries a right to subscribe for ½ share of the new stock and in subsequent sales is acquired ex-rights, or minus the rights. Dissociated from the stock, the rights become the subject of independent trading, free and apart from the stock, and being evidenced now by warrants, they are henceforth traded in in the manner of ordinary securities, for delivery and payment on the day following the sale.

First to be considered in connection with this second stage of trading in the rights is how the price of the stock is affected at the opening of the market on the day the stock first sells ex-rights. The stock begins to be quoted ex-rights at the commencement of trading on August 1, at the close of which the subscription privilege takes effect. This is due to the fact, already referred to, that the regular system of settlement on the Stock Exchange calls for the delivery and payment of the stock on the day following the sale, so that those who buy the stock on August 1, cannot become registered stockholders until the following day and do not, therefore, share in the subscription privileges.

When the stock ceases to carry the right, it naturally loses the value of the right. Accordingly, when the market opens on August 1, the price of the stock is marked down from the closing quotation of the previous day by the amount of that value. Suppose, for example, that the last quotation for the stock on July 31, was $150 and for the rights $16. Other things being equal, the stock begins on August 1, at $134. But of course, other things are generally not equal. Conditions of demand and supply are constantly changing, and instead of starting at $134, the stock is more

likely to begin above or below that figure. In expressing the price change from the last quotation of the preceding day account is taken only of this deviation from \$134, because the amount deducted for the value of the right has not been lost through any depreciation but has simply been split off from the stock and is now represented by what is virtually a separate security.

It has been noticed that in the first period of trading in the rights, when the stock is selling "rights on," the difference between the market price of the shares and the subscription of the new stock is three times the parity value of the rights. Since the price of the stock is reduced on August 1, by the value of one right, it is evident that in the second period of trading in the rights, when the stock is quoted ex-rights, the difference between the stock quotation and the subscription price is twice the parity value of the rights, so that the parity value is now found by taking the difference between the market price of the old stock and the subscription price of the new and dividing this difference by the number of rights necessary to subscribe for one share of new stock. The formula, therefore, for ascertaining the parity value of the rights when the stock is selling ex-rights is, $P=\frac{M-S}{N}$.

The market price of the rights during the second period of trading in them tends to coincide with this parity value, as any appreciable divergence from the parity value at once opens an opportunity for arbitraging and the other transactions entered into for a profit, which bring the stock and the rights closer to mutual parity, just as when the stock is selling "rights on."

In the light of the foregoing discussion of the value of stock rights it is not difficult to see that a stockholder is no better off for his acquisition of the rights than he would be for the receipt of a stock dividend. While he gains the value of two rights, to revert to our hypothetical example, on every share of new stock he subscribes for, he loses the value of the same number of rights on his old stock when it begins to sell ex-rights. Nor does he profit from a sale of the rights, for again, the amount realized on the sale is balanced by the loss on the old stock when its market price is marked down as it goes on an ex-rights basis.

Moreover, as has already been observed, when the rights are at parity with the stock, it is of little consequence to an intending stockholder whether he obtains the stock by purchasing old shares, or whether he gets it by purchasing rights and subscribing for the new stock, as in either case the cost of the stock is the same. It argues, then, that the stockholder of record who receives the subscription privilege directly from the issuing company has no particular advantage over the outsider who secures the rights by purchase. On the contrary, since in actual experience the rights usually sell at a discount from parity, the stockholder is to that extent at a positive disadvantage as compared with the outsider; it is actually to his interest to sell his stock and thus forego the subscription privilege, and then reacquire the privilege by purchase in the market. In fact, it is only in the very rare instances when the rights are selling above their parity with the stock that the shareholder is better off in this respect than the outsider.

Then, too, it must not be overlooked that the direct recipients of the subscription rights frequently sustain a loss of a not inconsiderable part of the value of their stock holdings by reason

of the decline of their market price which usually follows the declaration of the subscription privilege. The rights are, therefore, to be looked upon as signifying a sacrifice rather than a positive benefit. It would indeed be a strange phenomenon if the occasion of the company's raising necessary capital were to be a boon to its stockholders. And yet such it is regarded by most investors, simply because they fail to comprehend the real significance of the subscription privilege. They generally lose sight of the fact that stockholders can only profit as the company profits; in other words, that their source of benefit is not in a subscription privilege, not in a stock dividend, not even in a cash dividend, but only in an increase in the company's earnings. The receipt of a cash dividend is offset by a corresponding decline in the value of their investment, the market price of the stock being marked down as the stock begins to be quoted ex-dividend.

The very term privilege as applied to stock rights is in a way misleading. Properly construed the rights really denote a compulsory choice on the part of the stockholders of one of two alternative courses of action—either to increase their investment in the company or to dispose of a part of it. When the stock begins to sell ex-rights, a portion is split off from each outstanding share, and thereafter during the subscription period the stockholders' equity in the company is represented by two classes of securities, the reduced shares and the rights. If a stockholder now, to return again to our example, exercises his rights, he adds $100 in cash to two rights and exchanges the whole for one new share. The entire proceeding is an averaging process, consisting of subtracting such equal portions from the two old shares as will, when added to the subscription price, constitute a third share equivalent to one of the old reduced shares.

On the other hand, if the stockholder sells his rights, he really parts with a portion of his investment. Suppose the shares, selling ex-rights, are quoted $134 and the rights $17. If he owns two of each, his total interest in the company's equity, according to the market's valuation, amounts to $302, of which sum $268 is represented by the shares and $34 by the rights. If at this moment he sells the rights, he reduces his investment from $302 to $268. By the same token, the purchase of the rights constitutes in itself an investment of the company, which, however, must be increased by the amount of the subscription price so that the total may be represented by a share of stock equivalent to one of the old.

While not of any practical importance, it is nevertheless of some value in connection with this discussion to note what takes place when a stockholder, either through ignorance or oversight, permits his subscription privilege to lapse, neither exercising nor selling it. It is plain that he forfeits almost the entire portion of his investment represented by the rights, which becomes automatically distributed among all the stockholders, including himself, in proportion to their respective holdings of the stock.

The view of stock rights explained in the preceding discussion is the one taken in the Maryland District Court decision. It was there held that the sale of stock rights was a sale of capital and that the gross returns were, therefore, not taxable income but only such portion of them as represented profit, or the excess over and above the theoretical cost of the rights to the stockholder as figured on the basis of what he had paid for the shares. In ascertaining the amount of this profit the

court first added the amount received for a right (one right entitled him to subscribe for one share) to the subscription price, thus substantially arriving at the market value of a share selling ex-rights, and then subtracted the theoretical cost of this share to the stockholder, which it found by taking the actual cost of the original share, which included the right, adding the subscription price, and dividing by 2.

It may be that the issuing company, following the customary practice of corporations, will pay the same rate of dividends per share on the increased stock as prior to the increase. This will manifestly mean a higher rate of yield on the stockholders' investment since that investment has not been augmented in the same proportion as the number of the shares, each of which in consequence represents a smaller investment than previously. But it is to be noticed that this larger yield will be received by all the stockholders —the old subscribing, the old non-subscribing, and the new stockholders who purchased rights and subscribed for the new stock—although the old subscribing stockholders will have a certain advantage over the others in that their individual investments will be relatively the largest, representing as they will the entire old and the new investments. Moreover, it must not be forgotten that the continuance of the same dividend rate per share is, or at least should be, solely a question of the company's earning power. It is not a necessary consequence of the subscription privilege, since the company is not bound to maintain the rate. However, even though the company does not promise in advance that the rate will be maintained on the increased stock, the general expectation that it will is a powerful incentive to subscribe for the new stock, for investors allow themselves to be attracted by any increase in the investment returns, regardless of whether such increase is justified by the earnings or not.

Next for consideration is the matter of fixing the price at which the new stock is to be offered to stockholders. In our example, where it was assumed that $500,000 of capital was raised, the price was set at par and 5000 shares were in consequence issued, the shareholders having been given the right to purchase one share of new stock for every two shares of old owned. But obviously, the same amount of funds might have been obtained by selling the stock, for instance, at $125 a share and issuing 4000 shares, that is, by entitling the stockholders to subscribe at that price in the proportion of two shares of new stock for every five shares of old. In other words, the price might have been increased and the amount of the offering correspondingly diminished. However, the company cannot decide upon the subscription in any arbitrary manner, but must have regard to certain considerations affecting its own and the stockholders' interest.

We may first determine the extreme limits within which the directors may exercise their judgment in fixing the subscription price. The price naturally cannot be less than par, since holders of the new stock would be contingently liable to the corporation and its creditors for the amount of the discount. Besides, if the old stock has been paid for in full and is, therefore, free from any such liability, the old and the new would constitute distinct issues each with its own status and perhaps have even separate market quotations. For these reasons only corporations whose stock is selling above par can offer a privileged subscription to its stockholders. Of course, if the stock is one without par value, there is no such

restriction on the directors' discretion in fixing the subscription price.

On the other hand, the subscription price cannot be higher than the current market price for the outstanding shares, as naturally no one would care to pay more for the new stock than for the old when both are in all respects to rank the same. Indeed, to insure the success of the subscription offer the price of the new stock must be placed sufficiently below the market quotation of the old to allow ample leeway for any possible drop in the latter during the subscription period. In several conspicuous instances in recent years the directors misjudged the course of the market for their company's stock, with the consequence that the stock offerings proved failures. Thus in 1919 the New York Central Railroad accorded its stockholders the privilege of subscribing for common stock at par, but before the right was availed of to any extent, the market price of the old stock declined below par and remained below for the balance of the subscription period. The subscription offer was rendered worthless, and as it was not underwritten, it was eventually withdrawn. In 1920 The American Woolen Company had a similar experience, although here the issue was underwritten. The underwriting syndicate was obliged to take over practically the entire issue.

Between the maximum and minimum limits as defined above there are certain factors which the issuing company must take into account when settling upon the subscription price. It has been seen that in selling their subscription rights stockholders really part with a portion of their investment. From this it is evident that the subscription price must not be too far below the current market quotation of the old stock, as otherwise the stockholders who could not subscribe and had to sell their rights would be disposing of an unduly large part of their investment. To take an extreme example, suppose the old stock, selling "rights on," is quoted $3100 and the subscription price for the new is $100, while one new share for every two old is fixed for the subscription ratio. The market value of the rights would be approximately $1000 (the difference between $3100 and $100, divided by 3), and those stockholders who sold their rights would, therefore, be disposing of almost one-third of their investment—$2000 out of every $6200 worth held. This would obviously work a great injustice upon such stockholders. The subscription price should, therefore, be set near enough to the current market quotation to keep the value of the rights at a reasonable figure. Where the market price of the old stock is not far above par, the subscription price may be placed at par, as is usually done.

Another consideration which may influence directors in their decision on the subscription price is the manner in which the proceeds of the issue are to be apportioned between the capital stock and the surplus account. If they are desirous of placing the entire proceeds to capital stock and thus making them a part of the company's permanent capitalization, they will make the par value of the stock the subscription price. If, however, they wish to divide the proceeds between capital stock and surplus, they will fix the subscription at the proper figure above par. In our example the entire sum of $500,000 received from the sale of 5000 shares was applied to capital stock because the shares were sold at par. Suppose, however, that instead 4000 shares had been sold at $125. Of the total proceeds, $400,000 would have then gone to capital stock and $100,000 to surplus.

It will be noticed that in neither of these cases is there any capitalization of surplus. Far from any such transfer of surplus to capital stock being made, the surplus in the one instance is unchanged, while in the other it actually increased. Only when stock is sold for less than par is a portion of the surplus capitalized, and only then can a subscription privilege be properly described as being equivalent to a partial stock dividend.

Note: Since this article went to press, the Supreme Court of the United States has rendered its decision in the case on the taxation of the gross proceeds from the sale of stock rights which was appealed from the Federal District Court of Maryland. It affirmed the decision of the lower court that such proceeds were not taxable under the federal income tax law, concerning in the latter's opinion that the sale of rights was a sale of a part of the stockholder's capital interest in the company. As reported in *The Wall Street Journal,* the Supreme Court said:

> The district court rightly held defendant in error liable to income tax as to so much of the proceeds of sale of the subscription rights as represented a realized profit over and above the cost to it of what was sold. How the gain should be computed is a matter of some contention by the government in this court, but it admits of little doubt. To treat the stockholder's right to the new shares as something new and independent of the old, and as if it actually cost nothing, leaving the entire proceeds of sale as gain, would ignore the essence of the matter, and the suggestion cannot be accepted. The district court proceeded correctly in treating the subscription rights as an increase inseparable from the old shares, not in the way of income but as capital; in treating the new shares if and when issued as indistinguishable legally and in the market sense from the old; and in regarding the sale of rights as a sale of a portion of a capital interest that included the old shares.

SIMPLE FILING SYSTEM IN SELLING EFFORTS

BY BERNARD G. PRIESTLEY*

FIRST to recover from the business illness commonly diagnosed as "buyers' market" were those companies, it is almost universally agreed upon by economical experts, that instead of allowing their salesmen figuratively to lie in bed waiting the passing of the ailment, coaxed them onto their feet, bolstered them up with both encouragement and new selling ideas, and sent them out to fight the disease. Nor did the sales executives of these companies let their salesmen fight alone. Such companies got behind their salesmen and lost no opportunity to make the road in front easier for them to travel.

Under a system that not only induces salesmen to give their best efforts and remain on the job constantly, but which also permits the sales executives at the home office and the various branches to pave the way and boost them along, the Northway Motors Sales Company is bucking the buyers' market situation with success. Although very complete in its workings, this system is an example of desirable simplicity. There is no reason why it could not be adapted very quickly—and with successful results—to almost any selling organization.

This system—a card index system—gives each sales branch manager up-to-the-minute data on just what his selling force is doing daily. Each branch office immediately forwards duplicates of this data to the home sales office. Since each branch manager knows daily the accomplishments of his selling force he is able to take instant action wherever it is needed. Likewise, because the data from the branches go to headquarters at once, the home sales department always has last-minute information on what is going on in each branch and can act without loss of time through investigation. Obviously, such rapid-fire collecting of data makes it impossible for a branch sales force to lag without both the branch manager and general sales manager knowing of it at once.

The foundation of the system is the Salesmen's Daily Report. (See Figure 1.) From the report of each salesman the data is taken that goes to make up both the branch and the home office records. This report must be made out in triplicate each day by the salesman. One copy goes to the general sales manager, a second to the department of sales promotion, and the third remains in the branch sales office.

The printed report blanks bear spaces for listing separately the name, address, business, and telephone number of each prospect called on by the salesman. Included also in the space for reporting on each prospect are the numerals 1 to 11. The salesman is required to check such numbers as, using the key at the bottom of each report blank as a guide, apply in each case. The key is:

1. New prospect
2. Old prospect
3. Interviewed personally
4. Interviewed by phone
5. Corresponded with
6. Out
7. Will see again
8. Has he something to trade in?
9. Name of person you are dealing with
10. What size does he want?
11. What truck does he like best?

*Special writer for *Administration*.

NORTHWAY MOTORS SALES CO.

General Offices: 1 Beacon Street, Boston, Mass.

Salesmen's Daily Report

.................................Branch ....19........ Date

Signed .... Salesman Signed .... Branch Sales Manager

This copy to General Sales Manager.

1	2	Name	Business
3	4	Address	Phone
5	6	9	
7	8	10	11
1	2	Name	Business
3	4	Address	Phone
5	6	9	
7	8	10	11
1	2	Name	Business
3	4	Address	Phone
5	6	9	
7	8	10	11

KEY: 1—New Prospect. 2—Old Prospect. 3—Interviewed Personally. 4—Interviewed by Phone. 5—Corresponded With. 6—Out. 7—Will See Again. 8—Has He Something to Trade in? 9—Name of Person you are Dealing With. 10—What Size Does He Want? 11—What Truck Does He Like Best?

Quality Always Pays

FIGURE 1. SALESMEN'S DAILY REPORT

Clerks in the branch offices and home office copy from the Salesmen's Daily Reports all the information needed to keep absolutely up to date two sets of filing cards used in the system. These are the Prospect Card (Figure 2) and the User's Card. (Figure 3). To complete the system, there is a New Prospect Report (Figure 4) which is made out after the salesman first visits a new prospect, and from which all necessary information for starting the Prospect Card is obtained.

The New Prospect Report is made out in duplicate (one yellow and one white) one copy remaining at the branch sales office, the other going to the general sales manager. This report contains the name of the branch, the name, address, business, telephone number, and rating of the prospect, and the source from which the name was obtained as well as the garage or truck office of the prospect; the name of the salesman; the name of the man to see, whether president, treasurer, secretary or buyer; the man in charge of transportation; size of truck interested in, body required, whether the prospect desires to trade in another machine, and if so, the model and make of it, how much it is appraised for, what he asks be allowed on the old truck, and the terms under which he would buy. Additional remarks may be made on the reverse side of the report, which also has space on its face side for recording the present truck equipment of the prospect, including the units, make, capacity, type, age, and performance of the trucks in service.

The Prospect Card bears the same information on its face side as the New Prospect Report. In addition, across the top of the Prospect Card run the numerals 1 to 31, designating the days of the month. Metal tabs pro-

jecting from the top of the cards are used to check off the date on which the salesman is due to make the next call on the prospect.

The reverse side of the Prospect Card is used for a record of the calls on the prospect. Space is provided for the date each call is made, whether the prospect is interested, whether he asked for a demonstration, or whether there

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Northway

Branch ____________ PROSPECT CARD

Name ____________ Salesman ____________

Address ____________ Phone ____________ Date ________ 19____

Business ____________ Source ____________ Rating ____________

Garage or Truck Office ____________

Man to see ☐ Pres. ____________ ☐ Sect'y ____________

☐ Treas. ____________ ☐ Buyer ____________

Man in charge of Transportation ____________ Feeling towards Northway ____________

Size of truck interested in ____________ Body Type Required ____________ Trade? ________

Make - Model ____________ Asked ____________ Appraised ____________ Terms? ________

PRESENT TRUCK EQUIPMENT

UNITS	MAKE	CAPACITY	TYPE	AGE	PERFORMANCE

Quality Always Pays

RECORDS OF CALLS

DATE	INTERESTED	ASKED FOR DEMONSTRATION	CHANCE TO CLOSE	RESULT OF INTERVIEW

Dates literature sent ____________

Figure 2. Prospect Card (Face and Reverse)

Branch ______________________ Northway USER'S CARD

or Territory ______________________

Name ______________________ Salesman ______________________

Address ______________________ Phone ______________________

Business ______________ Source ______________ Rating ______________

Garage or Truck Office ______________________

Man to see ☐ Pres. ______________ ☐ Sec'y. ______________

☐ Treas. ______________ ☐ Buyer ______________

Man in charge of Transportation ______________ Feeling towards Northway ______________

NORTHWAY TRUCK EQUIPMENT

SIZE	MODEL	MOTOR NO.	W. B.	BODY	DELIVERED	SALESMAN	SPECIAL EQUIPMENT

Quality Always Pays

NORTHWAY TRUCK EQUIPMENT (continued)

SIZE	MODEL	MOTOR NO.	W. B.	BODY	DELIVERED	SALESMAN	SPECIAL EQUIPMENT

MISCELLANEOUS TRUCK EQUIPMENT

UNITS	MAKE	CAPACITY	TYPE	AGE	PERFORMANCE

FIGURE 3. USER'S CARD (FACE AND REVERSE)

is a chance of closing a sale, and the result of the interview. At the bottom is left space for recording dates on which literature aimed to promote the sale of a truck is sent to the prospect.

The User's Card on its face side bears the same data as the Prospect Card with the exception that the truck equipment recorded is the Northway truck equipment. The reverse side

has space for continuing the Northway truck equipment record and for noting the other kinds of trucks in the service of the user.

Of course, before calling on prospects it is necessary to locate them. In entering new territory the Northway company gets a working list quickly from the classified listings in the telephone directory. Augmented by the list of truck registrations, the prospect list, after due investigation by salesmen, is narrowed down to a list of prospects, each company or individual on which there is a possibility of selling to. Companies selling other products undoubtedly would find other listings more appropriate for their particular needs, but at any rate the prospects must be found. Every effort is made to check up frequently the prospect lists of the Northway company in order to keep them up to date.

Through the system both the branch office and the home sales office are able to keep tabs on every move the salesman makes in handling prospects, once they are found. The value of this knowledge can be readily seen.

For example, the New Prospect Report contains all the information it is necessary to know to sell a truck to a prospect. The general sales manager and the branch sales manager get this information almost as soon as does the salesman himself. As a result both are able frequently to aid the salesman in selling the prospect exactly the kind of a truck he desires for his own particular needs. Of course if the prospect gets exactly what he wants he will be satisfied, and he will look to the company when he needs another truck. Knowing the particular requirements of each prospect also makes possible formulation of arguments, showing why it will be best for the prospect to purchase a Northway truck and sending him literature aimed directly at use of the truck for his needs. A personal letter to the prospect from the general sales manager or the branch manager often aids greatly in closing a sale.

From the New Prospect Report and the Prospect Card the sales executives are able to get a pretty good idea as to whether the salesman ought to sell a truck to a certain prospect. If the

THIS COPY FOR BRANCH SALES OFFICE

Northway

NEW PROSPECT REPORT

Branch ________

Name ________ Salesman ________

Address ________ Phone ________ Date ________ 19__

Business ________ Source ________ Rating ________

Garage

Man to see ☐ Pres. ________ ☐ Sect'y. ________

☐ Treas. ________ ☐ Buyer ________

Man in charge of transportation ________ Feeling toward Northway ________

Size of truck interested in ________ Body Type Required ________ Trade? ________

Make—Model ________ Asked ________ Appraised ________ Terms? ________

(Use Reverse Side for Additional Remarks)

PRESENT TRUCK EQUIPMENT

Units	Make	Capacity	Type	Age	Performance

Quality Always Pays

Figure 4. The New Prospect Report

salesman fails continuously to sell to good prospects it is a sure sign that there is something the matter with his methods. He may be letting down in various ways and a talk with him may give him the necessary impetus to set him going right again.

The Prospect Card reports every step the salesman makes in trying to close a sale. He is required to call on a prospect at least once a month, and since the record of each call is kept on the card there is no chance for him to skip a call and have his action go unnoticed. If no check was kept of his calls he could do as he pleased and frequently he might be tempted, especially when sales were coming hard, to pass up the prospect for several months, if not for good.

If a salesman fails to call on a prospect again within a month of the time of his previous call the Prospect Card is transferred from the Prospect Card file, where it is placed with the cards of other prospects on that particular salesman's list, to an open file, and any salesman at that branch can call on the prospect and get the commission if he makes the sale. The salesman taking the Prospect Card from the open file can at a glance get the information needed to talk intelligently on the prospect's requirements, so he does not need to waste his and the prospect's time in obtaining it over again.

Naturally, a salesman who neglects his prospects cannot hope to continue in the employ of the company. When he knows that the branch sales manager is aware of every time he skips a call he makes every effort to follow up the prospects, with the inevitable result that the chance for a sale is enhanced. Furthermore, the salesman is induced to call upon the prospects more often than he otherwise might because of the knowledge that his calls are checked, and the information on his Prospect Cards may indicate that he is not making the best of his opportunities.

The Prospect Card file acts as a constant reminder to the salesman as to whom he is scheduled to call on. It also gives the sales executives opportunity to remind the salesman when he is supposed to call on a certain prospect, and permits giving him suggestions concerning the best methods to pursue in closing with the prospect. In each branch office there is a master file of Prospect Cards for the sales executive. This file contains duplicates of the cards in both the salesmen's file and the open file.

The Salesmen's Daily Report enables the branch manager to check up each day what his salesmen are doing. If they are calling too many prospects on the telephone instead of visiting them personally, if they are seeing too few prospects a day, if they are making a lot of calls without any progress, or if they are doing other things that indicate they are incompetent or soldiering on the job, the branch sales manager knows it at once and can take such steps as are advisable to remedy the situation.

The chief mission of the User's Card is to place at the disposition of the branch and home sales offices all necessary information for further sales efforts in the direction of users of Northway trucks, owners of which have been found to be just as good or even better prospects than new ones. When it is desired that a salesman call on a user the former has only to consult the cards in order to tell just whom he will see and what style of trucks it will be best for him to talk about.

The salary arrangement for salesmen also is conducive to drawing the best efforts from salesmen. An untried man goes in Class C, receiving no drawing account. If he shows promise he is moved up to Class B, which entitles

him to $25 a week drawing account against his commission for six weeks. The best salesmen are placed in Class A. They are allowed $50 a week drawing account against their commission for six weeks. In order to remain in this class they must sell one truck or more a month, otherwise they drop back to Class B, and failing to keep up with the standard of this class, go to Class C, in which they must finance themselves entirely. This rate plan makes salesmen who are down desire to work up, and those with the highest rating strive to keep it, for to go backward means financial loss as well as humiliation.

Taken as a whole, the system gives sales executives all the information they need to measure the efforts salesmen are making; therefore, it permits taking numerous steps toward spurring salesmen to higher achievements and toward making their way easier. While it has every tendency to keep salesmen everlastingly on the job, it cannot, of course, make them work in itself. But it can and does give the sales executives immediate notice when a salesman is not working hard. Then he is either speeded up or replaced, so that the sales force is kept going constantly at top speed and efficiency, thereby giving the company one of its greatest assets in meeting the buyers' market situation.

SOME ECONOMIC ASPECTS OF THE SHIP SUBSIDY

BY R. W. WISHART*

IN considering the Ship Subsidy Plan which the President has submitted to Congress, the questions to be decided are: Will it confer on American shipping the benefits claimed? Will it do so at a reasonable cost? Will it enable the American manufacturer to place his goods on the market of the world at lower cost? Will it give him wider markets? Will it give the American workman more work and at better wages? Will it confer any benefits on the taxpayers collectively or individually which could not be better conferred in some less costly way? Or will its action be adverse on all these counts? The writer believes that the latter is the fact.

The standpoint from which the Ship Subsidy Plan is discussed in this article is that of economics, not of politics. It must be borne in mind, however, that economics and politics have become so interwoven in the matter of ship subsidies that it is at times impossible to consider them separately. Thus the President and the Chairman of the Shipping Board state that anyone who criticizes the measure they advocate should be prepared to submit a better one. From an economic and business standpoint this is not difficult. From a political standpoint it may be difficult; but that is a different matter from the business aspect of the question.

The history and the fundamental economics of the ocean carrying business are very generally misunderstood. Certain delusions as to these matters are reflected in the arguments of the advocates of the present Ship Subsidy Bill.

*Assistant to the General Manager, Insular Line.

One of the most prevalent delusions is that concerning preferential duties, to which the proponents of this measure attribute the supremacy of the American Merchant Marine in the early days of the last century. This argument is fallacious and based on a wrong premise in that it considers only one of many elements as important, if indeed the other elements are considered at all. In no other business does capital cost so vitally affect the success or failure of the venture as in the shipping business. It is a true saying that "every ship stands on its own bottom." Each vessel must be considered as a unit of production by itself without reference to other vessels in the same fleet under the same ownership.

In the days our orators so proudly refer to, of the fleet clipper ships, ships were built of wood and did not require the great industrial organizations which modern ship construction calls for. America had unlimited resources of the cheap materials of which ships were then built; skilled workmen followed as a natural corollary; skilled and resourceful seamen were abundant; the nation as a whole had not then turned to the development of a vast hinterland and acquired the habit of large returns on invested capital or labor, as it did in the half century following the Civil War; often ship master and merchant trader were combined in one, developing some of the most daring and romantic figures in the history of international commerce. These elements all had a share in developing a shipping that has been the nation's pride ever since, but of these elements low cost of ships was the determining factor.

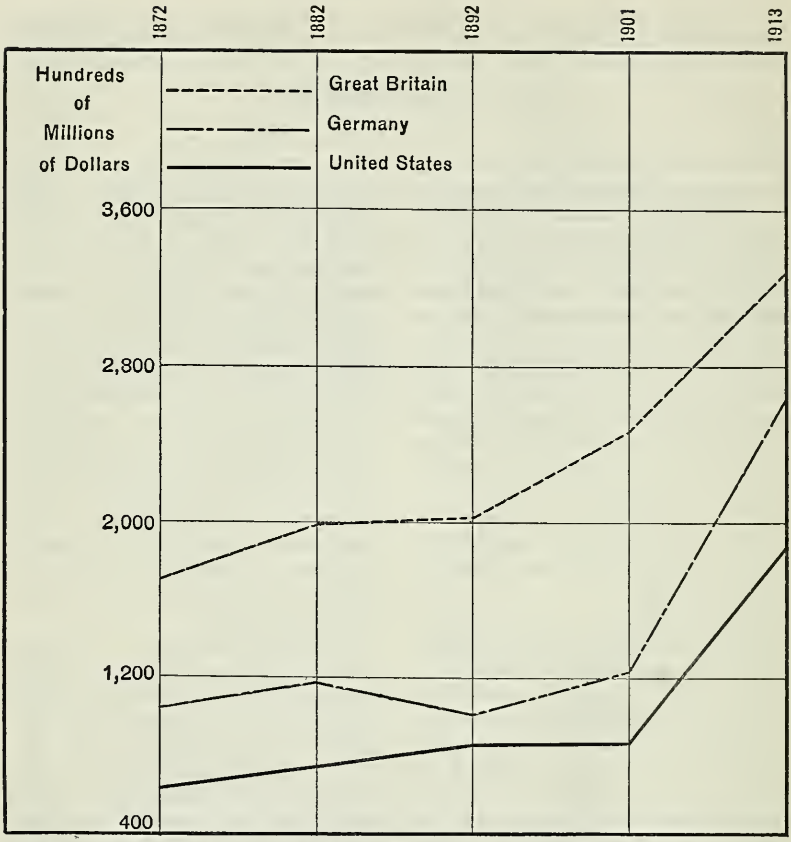

Figure 1. Chart Showing Comparison of Import Trade of the United States with that of Great Britain and Germany

The beginning of the decline in American shipping was contemporaneous with the inception and development of the iron industry on a large scale in England. The iron industry in the United States was not then even in the infant industry class. Low cost of building ships was being transferred from America to Great Britain and the Continent, and it has remained there ever since. The Civil War halted the activities of American yards and American shipping, while those of Great Britain received a great impetus, which was never overcome, due largely to mistaken ideas of protection. Preferential duties, in a time when our commercial structure was not as complicated or as specialized as it is today, may have had something to do with success, but they were not the most important or controlling element, their influence was merely contributory, if not entirely negative.

Consider briefly the intermittent and sporadic attempts to re-establish the

American Merchant Marine, and the measures taken at the very same time to nullify them. The failure of these feeble efforts has been attributed by politicians, quick to prey on the prejudices of the public or to catch their imagination with well-sounding phrases, to the guile and cunning of Great Britain, when, as a matter of fact, it was due to failure to take cognizance of economic facts, one of which has already been stated, namely, the initial cost of ships. The great maritime nations of Europe have been developed under the principle of free trade as regards both the purchase of ships and the operation of ships not under the principle of government subsidies as so often stated by uninformed persons. England, until recent years, even permitted foreigners to engage in her coastwise trade. Englishmen and Norwegians were encouraged to buy their ships in the cheapest market and put them under their own national flag. Coincident with these measures, which

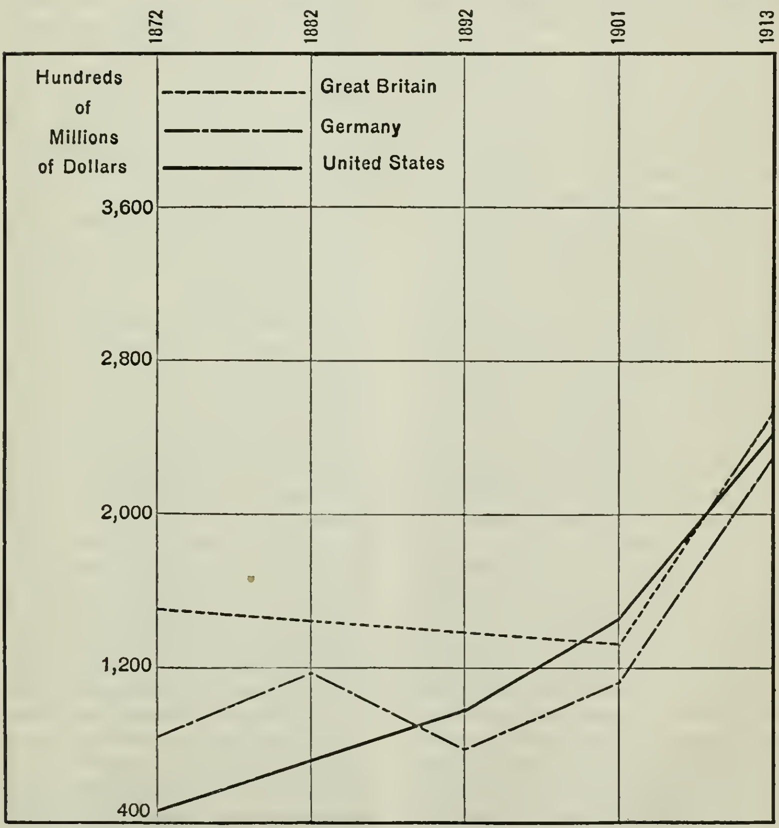

Figure 2. Chart Showing Comparison of Export Trade of the United States with that of Great Britain and Germany

the test of time and competition has proved to be sound, the United States on the other hand, adopted and still maintains a policy of so-called protection. There is in this country, unfortunately in great abundance, a type of legislator who thinks of international trade and international relations in terms of domestic trade or relations. The enforcement of an uneconomic domestic law can be made effective, but it is idle to attempt to give force to an uneconomic or discriminatory act, such as the bill under discussion, outside the confines of our own country, for the reason that others will ignore it or retaliate. Protection of industries in the United States no doubt accomplished much good, as well as some evil, but its application to the operation of ships has always been a mistake.

It may be supposed that an initial mistake was made in the confusion of the term "ship building" with that of "ship operating." The intention may have been to protect both activities; in fact, the measures taken protected neither. When the American operator was deprived of the privilege of buying his ships in the cheapest market and putting them under the American flag, he was put out of business. The shipyards would also have been put out of business except for the fact that our coastwise business was reserved for American vessels exclusively. (It is now proposed to bring the Philippine Islands within the restriction of the coasting trade, though by what process of reasoning it is hard to say.) The experience gives a striking example of an uneconomic law being workable in domestic commerce, and disastrous in international commerce. The way to protect the American ship operator is to allow him to start even with his competitors in the matter of first cost, and as nearly as possible on a parity as regards operating costs. On the contrary, every bill drawn to foster and protect the American Merchant Marine has prevented this, and has been and is in reality a measure to protect American shipyards, and has operated to "hamstring" American ingenuity, invention, and industry. This measure now before Congress is no exception. The application of all of its provisions would involve us in endless "lawyer arguments" and alienate every nation with which we wish to be on good terms.

It is not the intention in this article to discuss the provisions of the measure, as they have already been given wide circulation through the press. The writer, however, invites attention to one of the provisions, namely, that which provides that when companies earn more than 10 per cent on their capital stock in any one year they will no longer be permitted to share in this subsidy, and will devote anything in excess of that amount to repaying the sums previously paid to them as subsidy, so that all the money expended will eventually find its way back to the Treasury. This would seem to be a perfectly safe, conservative proposition, except for the fact that steamship companies generally do not earn such dividends. If shipowners could be sure of average earnings of 5 per cent per annum during the life of their vessels they would be greatly relieved. British reports give the average earnings of all vessels under the British flag for a long period before the World War as less than 9 per cent. It is true that ocean freights rode to dizzy heights during the war, but conservative investors, or plungers either for that matter, do not invest millions on the basis of such a contingency as a world war. It may be remarked here that the American public is not interested in investments carrying the usual business risk and earning less than 9 per cent,

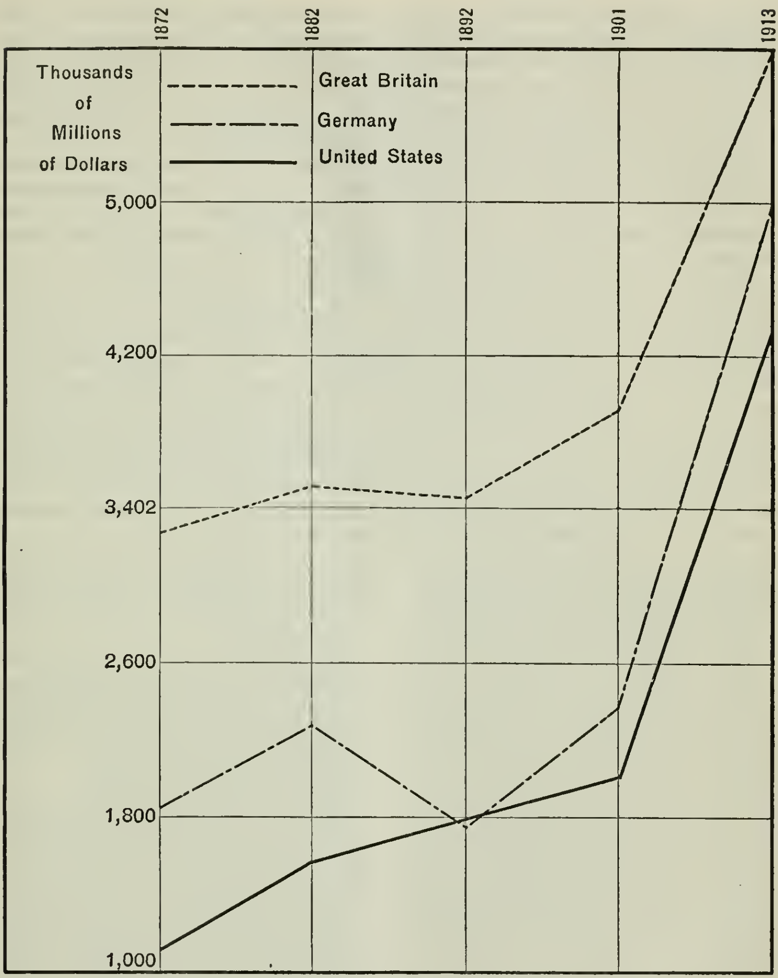

FIGURE 3. CHART SHOWING TOTAL FOREIGN COMMERCE OF THE UNITED STATES WITH THAT OF GREAT BRITAIN AND GERMANY

especially when it is problematical if even that figure will be reached.

The object of this measure is said to be to get the government out of the shipping business, i.e., to make the purchase of ships so attractive that it will be enabled to sell its fleet to private investors. The fleet cost, we are told, in the neighborhood of three billions of dollars. If it were to be sold at 10 per cent of its cost price, $300,000,000 would be required to buy it. The Chairman of the Shipping Board is reported to have testified that there is available in the

United States for investment in ships $15,000,000. What becomes of the balance of the fleet, practically the whole of it? If the Shipping Board continues to operate it, which it is now doing at a loss of some sixty millions of dollars a year, that amount will have to be added to the cost of providing transportation for American commerce.

The total cost of the subsidy per annum, at the rates named, is estimated by the Shipping Board, at $30,000,000. It is provided, however, that if the rates are found to be inadequate the board is to have authority to increase them not exceeding 100 per cent. As the rates are admittedly inadequate to cover the difference in cost of operation between American and foreign ships, it may be safely assumed that the cost will be $60,000,000 a year, to which should be added the operating loss of the Shipping Board, making a total cost of between $100,000,000 and $120,000,000 annually.

The Shipping Board vessels are all expensive, and in the case of some of them, the 535's for example, the expense was exorbitant. Some were well constructed and a great many were not; some are good ships and some are absolutely worthless and could not be operated even if given away. It is questionable if a great many of them could be operated at any price. These statements are all comparative, the comparison being made with the ships against which they will have to compete.

The statement has been made that a nation's place and importance in the world depend upon the extent of its merchant marine. Prior to the war Norway had one of the largest merchant fleets in existence. Was Norway at that time considered of greater importance in the world than the United States? Were its exports or imports as large? Did it in general exercise a greater financial and industrial influence than the United States? Germany also bent every energy to building up an immense mercantile marine, she established banks and trading houses throughout the world, she sent thousands of her best trained young men to settle in foreign countries for the sole purpose of promoting trade, yet she never overtook the lead which the United States gained over her in 1892 as an exporting nation.

The argument that a national mercantile marine is required to furnish transport for the American manufacturers is incontrovertibly refuted by the record of the United States itself, as shown by Figures 1, 2, 3, 4 and Table 1 of this article. The first three figures showing respectively the imports, exports, and total foreign trade in comparison with Great Britain and Germany, cover the period from 1872 to 1913. No reference is made to war figures, as they furnish no indication of normal growth.

Figure 4 covers the same period, and graphically compares imports with exports, showing that since 1892 the United States has stood second to England as an exporting nation, but first in excess of exports over imports.

Table 1 gives the annual figures of the value of sea-borne exports and imports of the United States from 1860 to 1892, the percentages of increase or decrease in relation to the base figures for 1860, and the percentages carried in American vessels. This period was taken because it is the period of the decline of the American mercantile marine. If this decline had any influence on our foreign trade it should have been reflected in the statistics of so long a period. The figures prove the contrary. While the percentage of goods carried in American vessels constantly declined the percentages of goods bought and sold constantly rose,

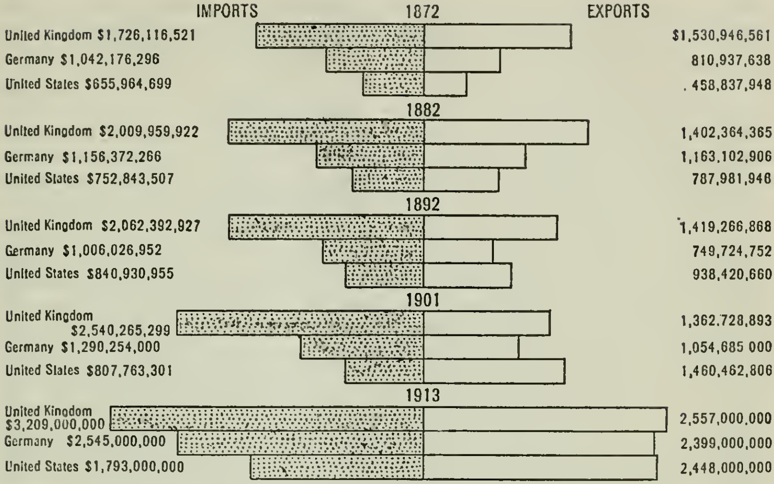

Figure 4. Value of Imports and Exports of Three Leading Exporting Nations. Note Export Balances in Favor of the United States.

except for certain periods of depression caused by forces foreign to shipping, such as wars, panics, and other phenomena of our industrial life.

The question of a ship subsidy is inextricably linked up with the whole question of the rehabilitation of Europe and the settlement of her debt to America. It cannot properly be considered except in conjunction with reparations, refunding, the tariff, and numerous other questions affecting the stability of the world and its exchange transactions. One of the favorite arguments is that before the war America was a debtor nation, but has now become a creditor nation, and that if in the former position others carried our products, we should now reverse the process and carry theirs. Consider this argument a moment. America was a debtor nation before the war merely as regards invested capital — that is, large quantities of American securities were held in Europe and we exported the dividends. America has not for many years been a debtor nation as regards the exchange of commodities other than capital. During the war we repurchased practically all of our securities and invested vast sums in loans to Europe. We have to get this money back in some way. We hold something like 50 per cent of the world's gold supply. Our debtors cannot pay us in gold. We are contemplating erecting a tariff wall to prevent Europe from repaying us with goods. Are we further going to prevent her from paying us in services, such as the carriage of our overseas commerce? Our best customer is Europe. She is impoverished, almost bankrupt. Are we deliberately going to force into bankruptcy our best customer? If so we shall have no use for a merchant marine, as we shall have no customers for our surplus products.

Consider from a strictly business standpoint the geographical locations of the countries involved in the proper adjustment of this question, the nature of their products and the extent of their industrialization. To Great Brit-

ain the overseas carrying trade is a vital national necessity. Stop British shipping for six weeks and Britain starves. England produces practically no raw materials except coal. She is, therefore, forced to import raw materials, giving her vessels homeward cargo, which she fabricates and re-exports, less the amount held for home consumption, giving her vessels outward cargo. The countries which produce the bulk of the raw materials used in manufacture, with the exception of the United States, import practically all of their manufactures. The United States alone of all the exporting nations has its own manufacturers, plus the bulk of its raw materials. Commerce is an exchange of commodities. The Argentine and the United States both produce enormous quantities of grain and cattle. They, therefore, have no basis for exchange with each other as they both have with Europe. On the other hand, Great Britain, Germany, and Norway produce practically none of the things The Argentine does in commercial quantities, but practically all of the things The Argentine wants in exchange for its own commodities; as between these countries and The Argentine there is a natural basis for exchange.

Furthermore, an exchange between the United States and The Argentine involves to some extent a three-cornered operation. Argentine pays someone else and someone else pays us. This is all right theoretically so long as a mutual balance is maintained, but it is entirely different with respect to the handling of the physical commodities, which is what ships are concerned with. A British ship loading in New York for the River Platte can pick up a cargo there for the United Kingdom or the Continent, discharge, and load coal for the West Indies, and there load a cargo of sugar for New York or Philadelphia, and repeat this process indefinitely. If the proposed subsidy is sufficient to offset the disparity in operating costs, which no well-informed person believes, the American ship can do the same thing, provided it has the connections in all parts of the world to provide the right cargo at the right time. The incontrovertible fact is that even during the period of high freight rates and with the Shipping Board standing all losses, American ships which tried this kind of run had to steam part of the distance in ballast. This matter of foreign connections has a considerable bearing on the subject and cannot be ignored. So far as the writer knows, no solution of the problem has been proposed, except the abortive experiment of the Shipping Board in sending out its representatives to foreign ports, the results of which effort are best passed over in silence.

But granting for argument that such a plan is possible, how does it benefit the United States as a whole so to tax itself? Does the farmer get more for his wheat or the shoe manufacturer more for his shoes, or is either enabled to enlarge his market in any way? The market for the things which the United States produces is now limited only by the financial ability of other countries to pay for them. There are in the world today several millions of people close to the border of starvation, not to speak of the other millions well beyond the border. Is not this country as a whole better off, is not the world as a whole immeasurably better off, if our energies and capital are devoted to relieving this condition by the application of sane business measures designed to get our customers on their feet and able to buy our products, regardless of whose ships do the carrying, than to force them irrevocably into bankruptcy? This ship subsidy measure is only one of the elements in these proc-

Table 1. Value of American Ocean-Borne Imports and Exports (Exclusive of that Carried in Land Vehicles) Percentages of Increase or Decrease, with Percentages Carried in American Vessels, from 1860 to 1892.

Year	Imports				Exports			
	Value	Per cent of Increase	Per cent of Decrease	Carried in U. S. Vessels	Value	Per cent of Increase	Per cent of Decrease	Carried in U. S. Vessels
1860	362,166,254	..	..	....	400,122,296	..	..	....
1861	335,650,153	..	7	60.05	249,344,913	..	38	72.18
1862	205,771,729	..	46	44.84	229,938,985	..	43	54.55
1863	252,919,920	..	30	43.39	332,008,582	..	17	56.95
1864	329,562,895	..	9	24.64	340,292,139	..	14	30.22
1865	248,555,652	..	31	29.91	355,857,344	..	11	26.14
1866	445,512,158	23	..	25.15	565,426,394	41	..	37.79
1867	417,831,571	15	..	28.05	461,333,736	15	..	39.15
1868	371,624,808	3	..	33.09	476,902,839	19	..	36.70
1869	437,314,255	20	..	31.28	439,134,529	9	..	34.88
1870	462,377,587	27	..	33.14	529,519,302	32	..	37.72
1871	526,306,354	45	..	30.15	583,180,394	45	..	32.21
1872	622,703,085	72	..	27.69	461,974,378	15	..	35.60
1873	646,546,599	78	..	26.23	666,482,644	66	..	25.33
1874	581,347,913	60	..	29.54	708,310,187	77	..	24.33
1875	540,822,294	49	..	28.50	658,224,015	64	..	23.50
1876	464,529,204	28	..	30.08	659,901,954	65	..	25.17
1877	481,399,900	32	..	30.85	695,180,917	74	..	23.48
1878	453,906,847	25	..	31.38	736,135,188	84	..	22.40
1879	454,089,952	25	..	30.81	729,194,972	82	..	17.43
1880	652,812,281	80	..	22.35	829,799,730	107	..	13.05
1881	625,471,415	73	..	20.79	894,118,038	123	..	12.96
1882	701,784,628	93	..	17.98	738,423,286	82	..	12.92
1883	780,177,866	115	..	18.81	798,749,558	99	..	12.67
1884	647,557,399	78	..	20.23	713,939,835	78	..	13.32
1885	556,377,853	54	..	19.55	718,006,456	79	..	11.05
1886	610,880,453	69	..	18.72	660,380,163	65	..	11.54
1887	664,757,709	93	..	17.53	694,793,545	74	..	10.19
1888	691,747,755	91	..	17.06	673,807,139	64	..	9.67
1889	706,903,791	95	..	16.21	713,964,858	78	..	11.18
1890	748,689,048	106	..	15.83	824,878,782	106	..	9.03
1891	803,983,441	121	..	15.09	852,457,371	113	..	8.93
1892	787,675,867	117	..	16.82	997,056,676	149	..	7.67

esses, but it is an important one and must be considered in conjunction with the others.

The above figures are taken from reports of the Bureau of Foreign and Domestic Commerce, and show the advance of American foreign trade during the period of decline of the American Merchant Marine. In 1892, at the period of the lowest ebb of the mercantile marine, the United States jumped into second place among the exporting nations, which place it has held ever since. In 1913 the United States was only behind Great Britain by one hundred million dollars.

The writer challenges anyone to present a set of figures, taking into account all the known factors, which will prove that the shipping subsidy measure is defensible, that it will confer benefits on anyone other than the shipyards

and possibly a few in the shipping business. Let us put sentiment aside and get down to realities. When this is done, can it be proved that under the proposed measure American ships can compete in a free world market? Can it be proved that the investment of the American people of some three billions of dollars can be saved and made to pay interest charges on the investment? Can it be proved that the Shipping Board fleet can be sold? Can it be proved that the passing of this measure will benefit Americans as a whole or advance their interests one iota? If these things can be proved by facts and figures, now is the time for someone to step forward and do so.

Returning to the suggestion that critics of the present measure should submit a better plan, the author ventures to make the following suggestions:

Create in the United States a few great free ports like Hamburg and Copenhagen, where raw materials may be brought free of duty for manufacture and re-export, so that American ships will be able to get homeward as well as outward cargo.

Appraise the Shipping Board fleet, vessel by vessel, each one separately, write their sale price down to their correct values, and offer them for sale to anybody who wants them and has the money to pay for them, Americans or foreigners. Charge the deficit off to the cost of the war.

Remove the bars which prevent the American operator from purchasing ships in the cheapest market.

Repeal the laws which force him to pay higher operating costs; permit him to employ sailors freely in the world market, which is the one he has to operate in; let him employ Chinamen, Lascars, or anybody he is able to get at the same wages his competitors pay.

FIRE INSURANCE COMPANY ACCOUNTING—II

BY WILLIAM B. WIEGAND*

As was indicated in the closing paragraph of the article on "Fire Insurance Company Accounting,"[1] the preparation of the statement of income and disbursements is but a preliminary step in proving the amount of ledger assets as it appears on the balance sheet. A study of the section of the balance sheet headed "Assets," the fourth part of the financial statement of the conventional blank (Figure 1), will show that there are three groups of assets, namely, ledger assets, non-ledger assets, and assets not admitted. The first of these are similar in principle to those met with in any business; the second represent accruals and other items found on subsidiary records, and the third are items contained in the first two groups which are required by law to be deducted in determining the total assets available for the discharge of liabilities.

Before proceeding to discuss the first of these three classes, it may be well to consider some of the restrictions and limitations imposed upon them by statute. The United States Supreme Court, in the case of *Paul v. Virginia* (8 Wall. 168), held that the business of fire insurance is not commerce, and later repeated that the contract of insurance is not an instrumentality of commerce, but a mere incident of commercial intercourse. Instead of a single governmental regulatory body, such as the Interstate Commerce Commission, to supervise the business with the consequent advantages of uniformity of rulings and decisions, there are 48 state departments or commissions controlling the business transacted within their respective jurisdictions. It is obviously impossible in an article like this to enumerate the provisions of the insurance laws of the various states. Where any specific reference is made in this article to statutory requirements, it is understood to be in connection with some section of the New York law, under which most of the leading companies have been organized. Although that statute is sufficiently inclusive in its provisions to serve as a guide for other states, it is always necessary to consult the law under which a particular company is operating, to determine the legality of its investments.

In practically all states, it is required that the capital with which a company may incorporate shall not be less than a stated amount which is to be paid in cash at a price not less than 150 per cent of the par value. This provision takes on an added feature when read in conjunction with the requirement that the funds of the company to the extent of the minimum capital requirement must be invested in bonds of the United States, of New York State, or any of its counties or incorporated cities. Excess funds, that is, the paid-in surplus represented by the subscription price above par and the difference between the minimum amount of capital and the total capitalization, where the latter is greater, may be otherwise invested.

Permissible investments may be made:

1. In bonds of any state.
2. In first loans on bond and mortgage

* Formerly an Examiner for the New York State Insurance Department, Albany, New York.

[1] See *Administration* for June, 1922, p. 713.

4 ANNUAL STATEMENT OF THE ________________ (Write or stamp name of company) Form 2

IV.—LEDGER ASSETS

1 Book value of Real Estate (less $______ incumbrances), per Schedule A . . . . . $

2 Mortgage Loans on Real Estate, per Schedule B, first liens, $______

other than first, ______ . . . . .

3 Loans secured by pledge of Bonds, Stocks or other Collateral, per Schedule C . . . .

4 Book value of Bonds, $______

and Stocks, $______ per Schedule D . . . .

5 Cash in Company's Office . . . . $

6 Deposits in Trust Companies and Banks not on interest, per Schedule N . . .

7 Deposits in Trust Companies and Banks on interest, per Schedule N . . .

8 (a) Agents' Balances representing business written subsequent to October 1, 1921 . . .

9 (b) Agents' Balances representing business written prior to October 1, 1921 . . . .

10 Bills receivable, taken for Fire risks . . . .

11 Bills receivable, taken for risks other than Fire . . . .

12 Other Ledger Assets, viz: ______

13 ______

14 ______

15 ______

16 Total Ledger Assets, as per Balance on page 3 . . . . $

Non-Ledger Assets

17 Interest due, $______ and accrued, $______ on Mortgages, per Schedule B . . $

18 Interest due, $______ and accrued, $______ on Bonds, per Schedule D, Part 1 . .

19 Interest due, $______ and accrued, $______ on Collateral Loans per Schedule C, Part 1

20 Interest due, $______ and accrued, $______ on other Assets (give items and amounts) . . . .

21 ______

22 ______

23 Rents due, $______ and accrued $______ on Company's property or lease

24 Total . . . .

25 Market value of Real Estate over book value per Schedule A . . . .

26 Market value (not including interest in item 18) of Bonds and Stocks over book value per Schedule D . . . .

27 Other Non-Ledger Assets, viz: ______

28 ______

29 ______

30 Gross Assets . . . . $

Deduct Assets not Admitted

31 Company's stock owned, $______, loans on, $______ . . . . $

32 Supplies, printed matter and stationery . . . .

33 Furniture, fixtures and safes . . . .

34 Agents' Balances, representing business written prior to October 1, 1921 . . . .

35 Bills receivable, past due, taken for premiums . . . .

36 Excess of Bills Receivable, not past due, taken for risks over the unearned premiums thereon . . .

37 Loans on personal security, endorsed or not . . . .

38 Overdue and accrued interest on bonds in default . . . .

39 Book value of Real Estate over market value, per Schedule A . . . .

40 Book value of Bonds and Stocks over market value, per Schedule D . . . .

41 Book value of other Ledger Assets, over market value, viz: ______

42 ______

43 Total Admitted Assets . . . . $

(a) Agency and home office premiums not over three months due less reinsurance, return premiums, commissions, and agents' credit balances. No other items to be included.
(b) Agency and home office premiums over three months due less reinsurance, return premiums and commissions. No other items to be included.

Figure 1. Statement of Assets

on unencumbered improved property within the state, if the value of the property is 50 per cent more than the loan.

3. In the stock, bonds, or other evidences of indebtedness of any solvent institution organized under the laws of the United States or any state.

This last provision does not permit a company to invest in the stock of a company engaged in the same kind of insurance business, nor in its own, as a purchase or as collateral. To illustrate the above provisions, a corporation organized in New York with a capital of $400,000 would have to have invested in bonds issued by the federal government, or by the state of domicile or any municipal government thereof, at least $200,000, the minimum capital permitted. These investments are known as capital assets, as distinguished from the permissible assets described above in which the assumed corporation could invest the remainder of its capital and at least $200,000 more, the amount of the paid-in surplus.

Notwithstanding prohibitory sections of the law limiting the holding of real estate to that used as the principal place of business, and that acquired for the accommodation of the business, other parcels may be included in the item "Book value of real estate." These have their origin in mortgage loans foreclosed by the company, and, after a period of five years following acquisition, are held with the permission of the state insurance official until such time as a sale would not injuriously affect the company's financial position. In a number of instances, where it is found expedient to have the property used in the business owned by a realty corporation, the stock of which is owned or controlled by the insurance company, the entire asset of real estate, if any, is made up of foreclosed properties. Where a company does own the building it uses in its business, it is necessary to calculate a rental charge to be taken up as a receipt and disbursement.

In the past it has not been the general practice of fire insurance companies to invest in real estate mortgages to any great extent, and a recent attempt to make such investments obligatory failed of enactment in New York State. Such legislation to avoid discrimination would have to be applicable to all corporations, those organized in the state, and those operating there, but incorporated elsewhere. This would naturally have led to retaliatory statutes in other states with unsatisfactory results. It might have developed that if the required investment in mortgages was based on the premiums written in a state the assets located there would have been fixed while the liabilities would have been variable.

Loans secured by pledge of bonds, stocks, and other collateral are permitted, but not loans made upon personal security, which, if made, must be deducted in ascertaining the total assets for the discharge of liabilities.

Where the assets grouped under the captions "Real Estate," "Mortgage Loans," and "Collateral Loans" are at all numerous, controlling accounts should be set up on the general ledger with subsidiary ledgers containing the detailed information. In the case of securities, an investment ledger (Figure 2) is practically a necessity and where the individual accounts are grouped according to report requirements, i.e., where bonds are classified as (a) government, (b) state, province, county and municipal, (c) miscellaneous; and stocks as (a) railroads, (b) banks and trust companies, (c) miscellaneous, the ledger serves a threefold purpose. First, it gives the details for the supporting schedules usually required in the annual report; second, it provides a complete check on the income re-

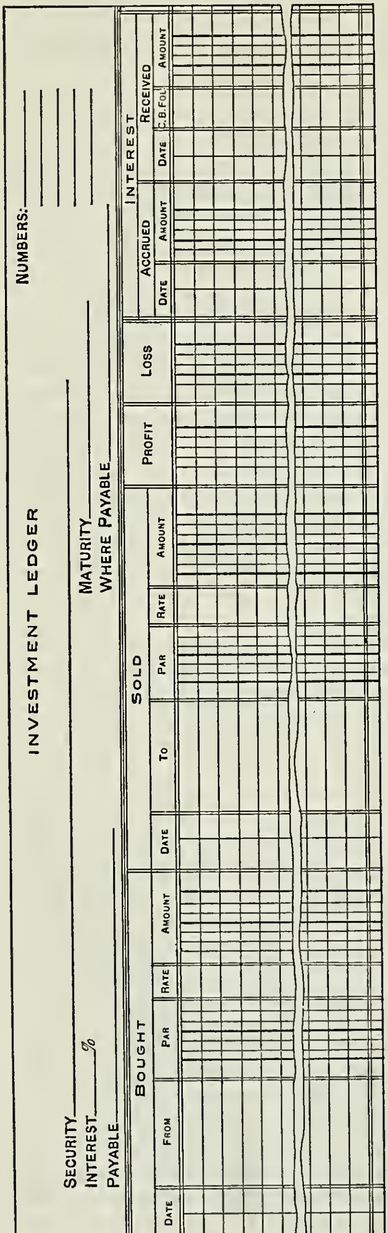

Figure 2. Investment Ledger

ceived by way of interest and dividends; and third, it gives the non-ledger asset of accrued interest on bonds. The subsidiary records for the first three assets on the balance sheet also provide this information concerning income and accruals. Furthermore, these records aid in determining the income items, gross profits on sale or maturity of ledger assets, and gross increase, by adjustment, in book value, as well as their corresponding disbursements, gross loss, and gross decrease. For these, of course, ledger accounts should be opened as the need for them arises.

The cash assets of a company are required to be stated as to the amount in office and the amounts with banking institutions, on interest and not on interest. In support of the amounts shown in the balance sheet, a schedule is required showing the amounts in the various banks and trust companies, not only at the date of closing, but also at the end of each month in the year. These amounts, with the total interest credited on deposits, should be obtained without difficulty from the company's stub-books or check registers.

In recording cash transactions, the best practice, particularly, if the company is of more than moderate size, would seem to be, to have several cash-books. One of these should be for receipts from agents which, where the agency force is large, will avoid some conflict in the work of the cashier and the clerks posting to the agents' accounts. Another should be for loss payments, which, as previously explained, are not only numerous, but require not a few distribution columns. To record all other cash receipts and disbursements, as well as all periodical totals of the subsidiary cash books, there must be a general cash book.

Aside from agents' remittances, the chief source of cash receipts is interest on bond investments and dividends on

stocks. Where the investment ledger is columnarized to show the income received from each investment, only one column is required in the cash-book, the total of which agrees with the income items entered in the ledger. A third column is necessary to record all other receipts, the entries on which are posted individually.

As the usual practice is to pay all bills currently, the disbursements side of the cash book is generally found to be columnarized with headings corresponding to the main items on the annual disbursements statement. A more convenient method would be to have one column for "Expenses," with one account in the general ledger controlling an expense distribution book. In this book would be entered the expense disbursements through cash and then through the agency journal, with the figures of the previous month brought forward in total and added to those of the current month.

If there is a local department, separate cash books for its receipts and disbursements will be advantageous, particularly in connection with return premiums, which in this instance are actual payments, instead of deductions from balances due.

As was mentioned in the June issue,[2] each agent at the close of a month sends to a district agent, or to the main office, an account current showing all policies issued during the month, the premiums and commissions thereon, disbursements and cash remittances. When these accounts current have been brought into agreement with information already in the office, that is, on daily reports, and the cash receipts books, and have been otherwise audited, they are entered on a summary sheet or, as it is sometimes termed, The Agency Journal (Figure 3). The columns of this book are, in certain in-

[2] *Administration* for June 1922, p. 713.

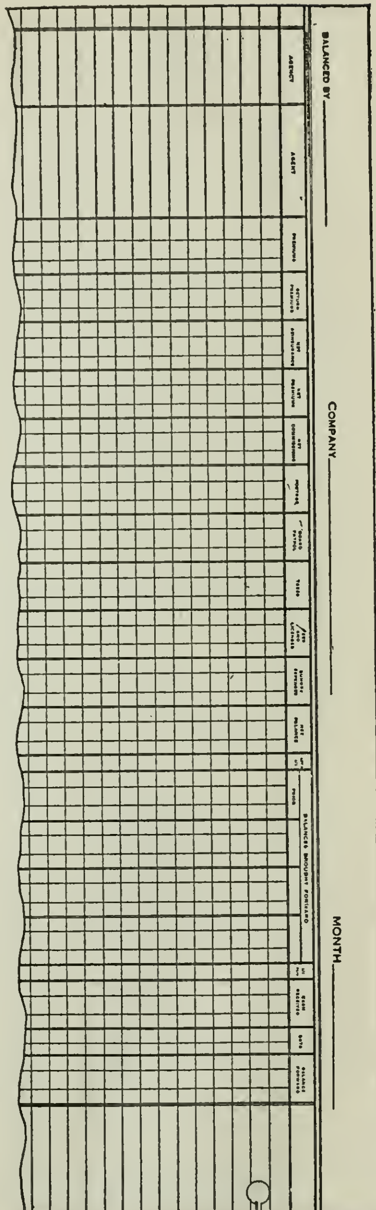

FIGURE 3. AGENCY JOURNAL

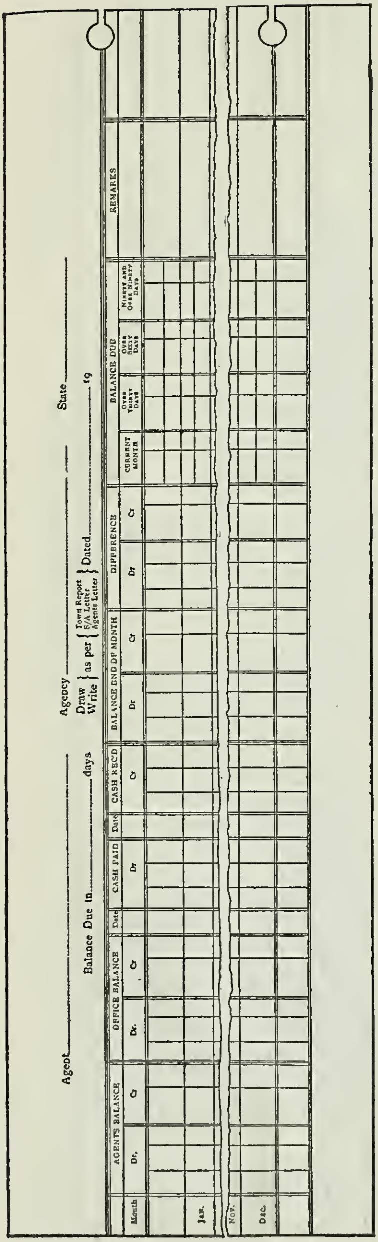

Figure 4. Agency Ledger

stances, provable with other records of the company. For example, the total of the premium column should be verified with the totals of the agency registers, the return premium column with the cancellation registers, and the cash credits with the cash receipts book. By providing extra columns for the opening and closing balances due from agents as well as additional space for cash receipts, in the event of agents remitting more than once during the month, some companies have made the journal serve as an agency ledger similar in principle to the so-called Boston ledger. Most companies, however, prefer to use the journal exclusively as a posting medium to a subsidiary agents ledger, of which there are many different styles, although most of them unnecessarily repeat much of the information contained in the agency journal. The form illustrated in Figure 4, Agency Ledger, in addition to avoiding this duplication of clerical effort, has an additional advantage in setting forth the differences that may arise between the balance reported by the agent and as calculated by the company.

The amount of agents' balances is, for the purpose of reporting to the insurance departments, classified into those representing business written subsequent to October 1, of the year for which the report is made, and those representing business written prior to October 1. Uncollected premiums more than 90 days old are stated separately.

Space is provided in the conventional report blank for bills receivable taken for fire and other risks and for such other ledger assets as the company's business may require. To the total of the foregoing assets, which, as previously stated, agrees with the balance at the foot of the "Disbursements" section, is added the "Non-Ledger Assets." This class of assets arises through what is in effect an in-

ventory-taking of all the resources of the company. Those appearing on the ledger are revalued at market prices and any increases over book value are taken up on the annual report. In regard to real estate, the market value must be the result of an appraisal made by disinterested and competent parties, and in regard to securities, market prices furnished by the insurance department are to be used. At one time, fire insurance companies were required to so value their bonds as to bring them to par at maturity, but a subsequent amendment to the insurance law exempted them from this requirement unless compelled by the superintendent in his discretion.

Because of the principle of regarding all accounts other than premiums and agents' balances as on a cash basis, interest is not entered on the ledger as it accrues, but only as received. Consequently, at closing interest accruals are determined and brought into the financial statement classified according to the assets from which they arise. This feature emphasizes the importance of the investment ledger alluded to in an earlier paragraph. No credit is allowed for anticipated or declared dividends on stocks except in the case of the declared and unpaid dividends on stocks which have been sold ex-dividend by the company prior to December 31, the date of the annual report.

Another asset omitted from the general books because of the cash basis principle is the amount of reinsurance recoverable on paid losses. While it would be more correct from an accounting standpoint to set up accounts charging reinsurance companies for their proportion of losses that have been paid, with a corresponding credit to the Paid Losses account, this is but infrequently done. It therefore becomes necessary in the annual inventory to examine the reinsurance recoverable column of the loss register and to list the open or unpaid items.

The total of the ledger and non-ledger assets comprise the gross assets from which there are various deductions. Of these, supplies, printed matter and stationery, and furniture, fixtures, and safes, are deducted only when they have been included in the two classes comprising gross assets.

Uncollected agents' balances, representing business written within three months of the date of report and not before, may be regarded as admitted assets. This is an inflexible rule, and notwithstanding the collection of premiums on business written more than 90 days prior to the filing of the report, their amount must be deducted. Because of a tendency of agents to remit lump sums without stating the premiums to which the payments apply, some difficulty may be encountered in determining the non-admitted assets.

Bills receivable are not looked upon with much favor by the insurance officials, for not only must those past due be deducted, but also the amount of those not past due in excess of the unearned premium for which they have been accepted.

If on the revaluation of assets the market value falls below the book value, the difference must be deducted, as must any investment not held in conformity with the law. As the market value of bonds in default excludes interest due and accrued, such interest must be deducted.

Where reinsurance on paid losses is recoverable from a company that has failed to obtain authority to transact business within the state, a deduction of that amount must be made.

The total of these assets not admitted is deducted from gross assets to give the total admitted assets available for the discharge of liabilities.

THE TRAINING OF FOREMEN

BY HENRY C. LINK*

THE once prosaic foreman has attained the distinction of a character in literature. To be sure he is characterized within the circumscribed limits of a top-sergeant in industry, but the fact that he is recognized as a top-sergeant is the strongest possible evidence of the importance with which his position has now come to be regarded. This recognition has expressed itself largely through the emphasis on the training of foremen. Indeed, during the past few years no phase of industrial training has received more attention than the development of foremen. It must be admitted that the recognition of the foreman's importance has been somewhat belated but this is being atoned for by the energies which are now being expended upon the problems of training foremen.

A brief statement of the requirements of the foreman's position will enable us to define more clearly the manner in which the training of foremen can best be carried out. In the first place a foreman must be technically and mechanically expert in the many phases which contribute to the success of his department. He must be master of the physical factors such as machines, raw materials, materials in process, etc., as they affect his department. But he must also be master of the mental and moral factors which make up an inevitable part of every foreman's job. The latter, rather than the former, is the distinguishing mark of foremanship. For, as the word itself indicates, a foreman is a man placed in charge of other men.

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In the past, a distinction has been made between foremen in charge of production shops in an industry and department heads in charge of office departments. This distinction is not only superficial but vicious. Whether a man be in charge of a group of office workers with desks and ledgers as his equipment or in charge of shop laborers with machines and trucks for equipment, the position is essentially one of foremanship. If office department heads have, in the past, been regarded as a higher class of men than shop foremen, it is only another indication that the training of the latter has been neglected and that their position has not been given the recognition which it merits. As a matter of fact, the necessity which industry will continue to be under of reducing overhead costs will probably reveal that the training of office foremen is just as important as the training of shop foremen.

The second characteristic of the foreman's position, whether in the shop or in the office, is the fact that he is the representative of the management to the workers. Since the managers are no longer able, in the modern expanse of industry, to know personally all the members of their organization, the foreman has become their interpreter. It is through him that the personal contact is maintained; and it is therefore of supreme importance that foremen and forewomen as a group should be so organized and trained that they will carry out this function of interpreters to the best possible advantage.

In the sudden emphasis on the *sys-*

tematic training of the foremen it is easy to overlook the fact that even without systematic training, the development of foremen goes on continually. Throughout the years when foremen were, as a group, neglected, they were in reality undergoing effective training of a kind. They were being trained through that most effective of all educational methods, imitation. Foremen have, for many years, closely followed the examples of their superiors. They have been facile in conveying to the workers those ideas and practices which their leaders themselves were following. If the attention of industry is now drawn to the systematic and intensive training of foremen, it is largely due to the fact that the leaders of industry have within the past few years made such rapid strides in their own ideas and practices, that their foremen have been unable to keep pace with them. This transition occurred so gradually and so subtly, that it was not until a considerable breach had been created between management and foremen that the discrepancy was suddenly and with something of a shock realized. The realization of this fact is expressed today in the numerous statements made regarding the importance of the foreman as a spokesman for the management. In theory, the foreman should be a part of the management. In actuality, there is a breach which can be bridged only by a systematic program of education.

II

This analysis, the truth of which few will question, must be borne in mind if a clear conception of the scope and purpose of foremen's training is to be arrived at. In the first place, the purpose of training foremen is to increase their understanding and control of the technical details which enter into their work—technical details concerning not only their mechanical equipment but the handling of their human equipment as well. It must be borne in mind, however, that the carrying out of these details depends very largely upon the character of the management. Indeed, the two phases are inseparable; for the factors that make a good foreman are determined very largely by the caliber of the industry and this in turn is determined by the character of its management. To the outsider it may seem as though foremanship implies qualities and characteristics which are peculiar to the position no matter what the industry or the management. Experience has proved this to be true in only a limited sense. There are certain points, certain general qualifications, which are universally characteristic of foremanship. Among them we may enumerate leadership, initiative, self-control, industry, determination, etc. But these qualities are demanded equally by a multitude of positions other than that of foreman. The manager of an industry knows that what constitutes a good foreman in his organization is a man in whom these qualifications express themselves *in terms of his own business and in terms of his own ideas of management.* In other words, the ideal foreman from an industrial point of view, is the foreman who not only masters the technique of his department, but who conducts his department in such a manner as to express the best intentions of his management.

If we have been correct in our analysis thus far, certain conclusions become inevitable. In the first place, that phase of the training of foremen which can be conducted by educational institutions outside of the industry itself must be limited to those

factors which are common to foremanship no matter what the industry. In the second place that part of the training of foremen which is peculiar to a particular industry should concern itself primarily with those practices which are peculiar to the processes and traditions of the particular industry.

If these two principles are correct, a third extremely practical principle also follows, namely, that the training of foremen by a particular industry should limit itself to those principles and practices which its management follows and which it is willing to support. It would be suicidal, for instance, for an industry to train its foremen in the principles of good industrial relations unless the management of that industry were prepared to incorporate these principles in their own method of management. It would seriously impair the effect of a foremen's training class if, for instance, its instructions regarding the principles of good organization were to be continually violated by representatives of the management going over the foreman's head to the workers themselves. To train foremen in methods and practices which the particular management has neglected or is unwilling to adopt, serves but to advertise among the foremen the inefficiencies of the management itself.

III

The fundamental and practical significance of these three principles is being rapidly recognized by industries and educational institutions. The training of foremen, more than some of the other aspects of industrial education, is peculiarly a problem for the particular industry. In introducing a program for training foremen, however, many industries have allowed their enthusiasm to rush them headlong into elaborate educational schemes. The preliminary steps in any plan of foremen's training should be the establishing of a periodic business meeting of foremen on company time. These meetings are not educational meetings in the conventional sense of the word, but they are nevertheless meetings which have an extremely high educational value. At these meetings, those details of the industry which concern the foremen in their relation to each other should be taken up in a strictly business manner. Headed by the production manager or some other member of the managing staff these meetings should systematically consider business matters which affect the foremen and department heads as individuals and as representatives of the management. There should be a carefully worked out system of committees through which questions that require additional deliberation may be investigated before being considered by the body as a whole. Meetings of this kind, aside from their obvious educational value in acquainting foremen with the details of the industry and with the workings of the management, provide a very necessary foundation for any lecture course or systematic classroom work which may be conducted in addition. In fact, they provide the logical channel through which the proposal for systematic training should be made. An expressed desire for such training which arises as the natural outgrowth of meetings of this kind will lead to much more fruitful results than classes superimposed on the foreman by the desire of the management.

Regular foremen's business meetings should not be confused with foremen's associations and foremen's clubs whose prime object is social. These social organizations, though not primarily educational, are nevertheless extremely valuable in developing a

spirit of good fellowship which serves as a fertile ground for the more strictly educational and business meetings.

The early training courses for foremen usually overlooked the importance of foremen's business meetings, and began with a series of general meetings on certain broad phases of industry. Usually these early courses were presented through booklets, though often without any printed matter whatsoever. They were accompanied by a lecturer on each subject. Sometimes an outside lecturer was obtained, sometimes a speaker was drawn from within the organization. Such courses were often very successful in the point of numbers attending and enthusiasms aroused. Several serious questions, however, have arisen in connection with this method. In the first place, it has become apparent that a large portion of the initial enthusiasm which greeted these courses was due to the initial enthusiasm of the management and the novelty of the idea in the eyes of the foremen. It naturally appealed to the president and other officers of a company to have an opportunity to present their side of the business to a group of their minor executives and it gratified these executives to hear from their officers in this novel manner.

These factors, however, were found to be incidental to a genuinely educational course. A group of foremen will display a keen interest in a lecture by the president or general manager of a company the first time for the sake of his office, but the second time only for the sake of the intrinsic value of what he has to say, and the manner in which he says it. Experience has demonstrated that the leaders of an industry are by no means necessarily successful as lecturers in a training course. It is also true that lecturers, whether company or outside lecturers, may sometimes be so dull or so entertaining as to discourage that independent thinking on the part of department heads and foremen which it is the object of such a course to arouse.

The last objection is the most serious one of all. It is very easy for the officers or managers of an industry to feel highly gratified at the seeming success of a lecture course for foremen when, as a matter of fact, its success may lie entirely in the mechanical smoothness with which it runs off. It is very easy for a group of foremen to become enthusiastic over a lecture course, when, as a matter of fact, their favor may be due to an entertaining lecturer, a free dinner, and an hour of complete relaxation. It is natural for almost everyone to overlook the fact that the value of education or of an educational plan depends not upon the amount of pleasure received but upon the amount of mental effort called forth. Indeed, the fundamental principle of education, as indicated by the derivation of the term *educate*, is to *draw out* rather than to *pour in*. To draw out an individual is to make him exercise his own thinking powers rather than thrust upon his passive ears a mass of carefully preconceived ideas. The latter course is characteristic of the lecture method, and the lecturer often acts as a soporific to thought rather than as a thought stimulant. Probably ninety-nine out of a hundred lecturers are more intent upon getting their own thoughts out than in drawing out the active thought processes of their hearers.

When all is said and done, the lecture method, valuable as it may be, has many drawbacks. In the first place, there is the difficulty of securing lecturers from within the organization —especially if it be a small one—who will be both instructive and interesting. In the second place, there is an almost equally great difficulty of se-

curing lecturers from outside the organization who can be relied upon to fit into the general scheme of the course and to present information which applies to the particular situation. Moreover, lecturers secured in this way are usually very costly. Thirdly, when a course is presented by means of a series of lectures, it is likely to lack continuity and logical development. It is practically impossible for one lecturer to build up on the work of the preceding one. Consequently the result is a conglomeration of rather poorly arranged facts and opinions. Fourthly, any lecture course, no matter how conducted, is likely to pall upon its hearers and gradually to kill off the interest originally aroused. Fifthly, the lecture course method discourages thought on the part of the individual; and where the efforts of individual thought are repressed, lack of interest inevitably follows.

IV

The realization of the shortcomings of the lecture method has led certain educators and industries to adopt a method of training foremen which relies entirely or almost entirely upon discussions rather than lectures. Conspicuous leaders in this development are C. R. Allen and his associates, and D. J. McDonald, Professor of Vocational Education of the University of Cincinnati. The former regard a group of 15 as the largest that can be profitably handled with the discussion method. A permanent leader is considered essential, and this leader must be expert above all things in the ability to arouse discussion among his pupils. He need not be an expert in the subject under discussion, nor be able to answer all the questions put to him. In fact, it is considered a virtue in a leader to say—"I don't know"—because this will throw the burden of the problem upon his pupils. Nor does the printed outline of the course developed by Mr. Allen and his associates offer much besides an outline of the problems which are to be discussed.[1] It is assumed that the discussion itself will lead the foreman to a solution to the questions raised. The course is given intensively, with about 20 meetings of two hours each, on successive days, and on company time.

This method has the great merit of eliciting thought and drawing out ideas on the part of the foremen. However, it is a difficult method to follow out, partly because industries have preferred to educate wholesale, that is extensively rather than intensively; partly because of the difficulty of obtaining or training leaders who can subordinate their own knowledge to the demands of a discussion. Moreover, it has been found that some foremen will not readily enthuse over this method, especially after having lived through a series of easy-going lectures. In spite of these difficulties, there is hardly a question that the discussion method, with groups of 15—certainly not more than 25—should be fundamental in any program for the training of foremen.

In this respect, however, as in respect to the lecture method, it is possible to go to extremes. It is an extreme to expect any leader who is not expert in the field with which he is dealing to lead a discussion with foremen which will arrive at positive results. It would be just as absurd to expect a good discussion leader to assemble a group of cooks and, by dwelling upon their individual problems, develop a chemistry of cooking. Or to turn over to an expert discussion leader a group of students and expect

[1] See "The Foreman and His Job," C. R. Allen, Lippincott, 1922.

him to draw out of their experiences with falling apples, shoe-horns, clothes, radiators, banjoes, etc., the body of facts which we today call "physics." Here, as in every other educational field, the leader should be an expert in the particular field in which he is assuming responsibility. That phase of the foreman's duties which deals with costs should be handled by a leader who is sufficiently versed in the matter. The phase of a foreman's duties which deals with human relations, the handling of men and women, should be entrusted to someone familiar with the industrial relations policy of the company. In this way it is not only possible to promote discussion and thinking on the part of the foreman, but it is possible to lead that discussion into channels which are genuinely constructive.

One large company has developed a unique and very successful adaptation of the discussion method. The course given was based on a series of short printed units, each of which covered the outstanding features of the work of a particular department. These units were prepared in each case by an expert in the department, but under the supervision of a man in charge of the training course. The discussions, however, were led in each case by the foreman or the manager of the particular department. In order to insure the proper discussion, a set of key questions was included in each unit and these questions were taken up during the group meetings. Although difficulty was anticipated in prevailing upon certain department heads to lead the group meetings, the response was remarkable. Not one foreman who was asked to lead a discussion refused to do so.

There are a number of conspicuous advantages in this method which make it worthy of thorough consideration. In the first place, it is economical. The company referred to, for instance, had 15 different factories in which the course was being carried on simultaneously. To engage professional instructors for all of these factories would have entailed a considerable expense, would, in fact, have been impracticable. The use of local leaders made it possible to dispense with the cost of any leader except the man in charge of the work in all the factories. Moreover, it was found that this method gave very valuable results through the development of local leaders. The opportunity which the foreman and the department heads had of presenting their problems and leading the discussion about them gave them a much better grasp of their work than they had had before. A further advantage of this method was the concreteness which was inevitable from a discussion led by the individual most immediately concerned. Finally it was found that foremen and department heads were much more ready to take part in a discussion led by one of their own members than they would have been in a discussion led by a man brought in from the outside or a member of the managing staff.

V

Underlying any thorough-going method of foreman training is a body of carefully prepared facts and problems presented in written form. These are the food upon which subsequent discussion should be based. Some written material has generally been the basis for foremen's courses, but too often this material has been in the form of books or pamphlets which were altogether too lengthy for the purpose intended. For foremen, a very brief text of not more than eight or ten pages for each discussion is pref-

erable. This text should be written so as to provoke thought even before the discussion is started. And for this purpose, it has been found particularly effective to incorporate a series of questions which should be studied by the foremen before they enter the classroom. These questions may then be used as the basis for the classroom discussion. They are an aid not only to the foremen but also to the leader who may not be particularly adept in the discussion method. In addition to the regular text, a short list of collateral reading should be added for the benefit of those who wish to read more extensively in a particular field.

Most foreman training courses in the past have consisted of a series of five or six meetings, distributed through the cooler seasons at intervals of about a month. Experience has demonstrated what common sense should have told us at the outset, that it is very difficult to maintain the initial enthusiasm and interest in a course so thinly spread out. For every meeting it is necessary to overcome the inertia which exists among foremen where the habit of attendance has not been thoroughly fixed. From a pedagogical point of view meetings held at such long intervals make it almost impossible to develop the continuity of thought which is essential to the building up of any educational course. On the other hand, some courses are given by means of meetings held on successive days over a period of four or five weeks. A series of intensive meetings of this kind undoubtedly makes it easier to maintain attendance and interest. On the other hand, meetings which are held on successive days make it practically impossible for the pupils to do the reading or studying which should precede each discussion. The ideal course is probably a compromise between these two extremes. A course covering a period of eight or ten weeks, with meetings held twice a week, is sufficiently intensive to maintain interest and continuity of thought, and extensive enough to allow the necessary preparation on the part of the foreman.

A test of the thoroughness with which these courses are conducted and of the value which the particular company attaches to them is whether or not they are held on company time. Many of the courses given so far have been on the men's own time. This policy is in keeping with the haphazard character of the wholesale lecture course, with its scant demands upon the foremen's mental equipment. If the training of foremen is really believed to be important from a company's point of view, and if a course is to be given with the sincere intention of accomplishing practical results, it is almost axiomatic that the meetings must be held on company time. Meetings held in this way will make it possible to require the regular attendance of every pupil. And the fact that the company is attaching so much importance to the course will stimulate the foremen to do the home reading and studying without which the course cannot be fully successful.

VI

Hitherto, most courses have been yearly courses which have been planned with absolutely no regard for courses to be given in subsequent years, or for individuals who might reach the rank of foreman or assistant foreman after the course had been given. If a second course was decided upon for a following year, those who had not taken the first course could take only the second course. In short, there has been no careful planning aimed at the construction of

a series of progressive courses covering a period of three or four years upon which a foreman, or sub-foreman, or group head could begin at any time and progress from one course to another regardless of any particular year.

The fundamental condition of a flexible foremen's course is the small group method. During the first year, a junior course may be given to as many groups as the number of individuals to be included necessitates. During the second year, an intermediate course, supplementing the junior course, can be given to those who have completed the junior course in the preceding year. During the same year, those individuals who have since become eligible, may begin with the junior course. In the third year, a senior course may be given to those who have satisfactorily completed the junior and intermediate courses. And in the same year, those who have not completed the first two courses may take up either one of these. These three courses can be repeated indefinitely according to circumstances, or supplemented with additional courses taking up special problems.

Naturally, the number of groups in any one year will depend upon the size of the organization and other conditions. The plan has the utmost flexibility in this respect. It is also reasonable to expect that each succeeding course will have a smaller number of pupils enrolled than the preceding course. In fact, one of the most valuable features of this plan is the rivalry which it will promote. This quality has been almost entirely lacking in the courses given hitherto, partly because a course in any one year did not lead definitely to an advanced course at some future time, partly because most courses have not been planned carefully enough to allow a comparison between the merits of the individuals enrolled. Moreover, the emphasis in the past has been upon the enrolment of large numbers in a course rather than upon the work in the course actually done by those enrolled. And it is characteristic of individuals that they do not value highly anything which is too easily obtained or which may be obtained by a large number of others regardless of personal merit. A progressive series of courses will help to overcome these disadvantages. In the first place, each course will begin with only a small number of pupils specially selected, and this limitation will at once arouse the interest of those who are not included but who will be eligible to membership in subsequent groups of the same course given during the year. In the second place, if the satisfactory completion of a course in any one year is made the condition for admission to an advanced course given in the succeeding year, it will be possible to place much more emphasis on the work done by those enrolled in any one group.

VII

The subject matter of a foremen's course will naturally depend largely upon the length of the course to be given. If a one year course only is contemplated, the tendency is to cover as wide a field as possible in the limited number of meetings to be held. As a result the course is quite likely to be altogether too general and inclusive to be of any great practical value. As a rule, the courses given hitherto have been too general and not closely enough tied up with the concrete problems and policies of the particular industry. If a series of courses covering a number of years is contemplated, it becomes possible to take up a number of different subjects in considerably more detail and with much greater

thoroughness. Assuming that three short courses covering a period of three years are to be given, the subject matter may be divided somewhat as follows:

For the first year, it is suggested that the foreman be given an idea of the company as a whole, its dominant policies regarding production, sales, and labor management. It is considered advisable to start in this fashion because as a rule foremen are men who have risen from the ranks and who are consequently so much absorbed in the details of their own departments as to be unable to appreciate their very important relation to the company as a whole. A discussion of the various aspects which enter into their company's success would therefore come as a very interesting revelation, and would give them a widened outlook which would contribute not a little to their value as company men and as representatives of their management. Among the subjects which could be covered in such a course are:

1. Company history, the story of their company's growth.
2. The nature of the company's product or service in relation to similar products or similar services rendered by other companies in the same field.
3. The advertising, sale, and distribution of the company's product.
4. The relation between the public and the selling department and the effect of this relation upon the manufacturing departments.
5. The cost department in its relation to the selling department and to the various manufacturing departments.
6. Purchasing and stores departments.
7. The maintenance department.
8. The planning or industrial engineering department.
9. The experimental or development department.
10. The industrial relations or personnel department and the labor policies of the company.
11. A study of each of the more important manufacturing departments showing the flow of materials and the relation which each of these departments bears to the others.

This list of subjects indicates roughly the manner in which the company as a whole may be made a concrete reality for the ordinary departmental man. These topics should be so presented and discussed as to bring out constantly the following points:

1. The principles of good organization.
2. The importance of teamwork or co-operation between all departments, whether functional or manufacturing.
3. The underlying economic principles which the industry has in common with all other human pursuits.
4. The absolute dependence at every point in the organization upon the human factor.

The second course should apply much more specifically to the problems of each particular foreman. For this purpose, the smaller the group the better the results. It is suggested that the subject matter for this course be grouped under three heads:

1. Material problems including
    (a) The listing and classifying of all materials used
    (b) Methods of ordering and obtaining materials
    (c) Conditions affecting materials
    (d) Nature of containers and storage facilities
    (e) Check on materials in process
2. Equipment problems including
    (a) A plan showing the layout of each department
    (b) A routing chart with different colored lines or strings to show the actual and most direct flow of materials
    (c) A study of the mechanical means for the most economical transportation of materials from one point to another

(d) A study of the value of equipment items with reference to cost, maintenance, and most economical use

3. Labor problems including
   (a) Labor turnover and how to figure it
   (b) The chief elements in the cost of labor turnover both in general and with reference to particular jobs
   (c) Comparison of turnover between various departments with reference to analyzing causes and finding remedies
   (d) The training and follow up of new employees
   (e) Job analysis and the clear definition of duties in the department
   (f) The factory council and its relation to the practical problems of the department
   (g) Various aspects of the industrial relations activities with reference to the particular department

The course for the third year could be made to follow approximately the same outline as that for the second year, except that it would now be possible to take up certain problems much more thoroughly, with special emphasis upon those which are giving the greatest trouble at the particular time. For example, in a year of business depression, the emphasis may rest on cost problems. In a year of difficult labor problems, the matter of labor management may receive special attention, etc. Throughout the entire series, the subject matter would be drawn almost solely from the immediate practical problems of the industry itself. That is, the method would be inductive, relying upon the experiences of the particular industry itself, and deducting from these practical experiences the theory and practice for further improvement. This is not only sound pedagogy but good business as well.

To develop and give such a course as this is not nearly as difficult as it may seem at first glance. Granted a supervisor of instruction who has the necessary educational point of view and who is allowed to enlist the cooperation of the department heads who have the necessary expert knowledge, it is possible to develop a course which will meet the peculiar requirements of the particular concern. And if the leaders are chosen from within the company, each one with reference to his superior ability in the subject under discussion, the course will not only have very practical results but will be carried on with a minimum of expense.

VIII

We return now to the question raised earlier in this discussion, namely: What part in the training of foremen may be played by public and professional institutions? This question may be answered in terms of the principles which we have formulated as underlying the scope of all industrial education. In general, it may be stated that outside institutions can handle only those aspects of foremanship which are common to foremanship in any industry whatsoever. However, since these common factors are very limited in number, the usefulness of such institutions is also very limited.

The various duties of foremanship can be defined only with reference to the work and policies of a particular industry. It would be absurd for an industry to send its foremen to a boarding-school to learn the duties of a foreman. It is almost as absurd to take a ready-made course in foremanship into an industry.

On the other hand, there are certain supplementary and very important adjuncts to foremanship which pro-

fessional and public educational institutions are particularly fitted to teach. The fact is commonly accepted that most foremen are deficient in the knowledge of such subjects as English, mathematics, charting, physics, economics, the history of labor, etc. These subjects are the particular field of public and professional educational institutions, and in these fields such institutions can be of particular service. Individual foremen vary so widely in their accomplishments in these fields that it is advisable to handle their training in these respects from an individual standpoint. Every encouragement ought to be given those foremen who wish to make up for deficiencies in their earlier education, and the resources of the community ought to be drawn upon to the fullest extent. Foremen who are unwilling to attend classes in such subjects may be helped by informing them about existing correspondence courses, particularly the correspondence courses now offered by so many state university extensions.

IX

To summarize the chief points in this discussion, we may say first, that the training of foremen and department heads should cover three phases:

1. The technical and material aspects of their work.
2. The direction of the force over which they exercise supervision.
3. The proper interpretation of the policies and spirit of the management to the employees.

Since these three phases, particularly that which has to do with the character of the management, vary widely with each company, the training of foremen is peculiarly a task of the individual concern; for what constitutes a successful foreman in a particular company is not a knowledge of the principles which underlie foremanship in general, but the ability to carry out, specifically, the practices and policies which are peculiar to that company and its management. As a foundation for education of the more formal kind, periodic business meetings of the foremen with representatives of the higher executive group are practically indispensable. Where, in addition to such meetings, regular classes are conducted, the object should be to arouse thought on the part of the foremen rather than to flood them with facts and ideas. The lecture method which has been used so extensively tends to do the latter. The former can only be achieved by taking foremen in small groups of about fifteen, and treating the subject under consideration by means of discussion. The well-known reluctance of foremen to enter into a class discussion can be overcome by a skilled leader, or by means of previously prepared questions which even an untrained leader can put directly to the men in the class. A written text, prepared in small units and accompanied by questions, is a prerequisite for any course which aims to cover a given field in a specific fashion. The units of this text, given to the foremen before each meeting, will enable them to do the reading and thinking which is essential if a discussion is to lead to fruitful results. No matter how well conceived and carried out, no single course can accomplish the training of foremen. Therefore, any educational plan should be so devised that it will provide a series of progressive courses extending over a period of three or four years. In one sentence, the training of foremen to be successful must be conducted according to sound educational practices and by a management which *knows* what it wants its foremen to *know* and to *do*.

EDITORIAL REVIEW

THE NEW BUSINESS ERA

In a recent work by James Harvey Robinson, he says:

> The uttermost parts of the earth have been visited by Europeans, and commerce has brought all races of the globe into close touch. We have now to reckon with every nation under heaven, as was shown in the World War. At the same time steam and electrical communication have been so perfected that space has been practically annihilated as regards speech, and in matters of transportation reduced to perhaps a fifth. So all the peoples of the earth form economically a loose, and as yet, scarcely acknowledged federation of man, in which the fate of any member may affect the affairs of all the others, no matter how remote they may be geographically.
>
> All these unprecedented conditions have conspired to give business for business' sake a fascination and overwhelming importance it has never had before.

In days of yore, it was not uncommon for the typical business man to be portrayed as a being much occupied with his own petty affairs, rather avaricious, and not conspicuously large-minded or public-spirited. It was supposed that when a man went into business he did so purely because it was a money-getting vocation. Those who were ambitious, public-spirited, and intellectual, studied law or some other profession, followed scientific pursuits, or went into public life.

For more than a generation this has been changing, and the man of business affairs has been steadily growing in dignity and public estimation. The manifest necessity and great advantage to the community of efficient and well-managed business enterprises, have changed completely the older conception. As a function of great social service, the new idea of business has its appeal to those who love their fellows and would therefore promote the productive industries and the commerce by which the world lives. As an intellectual pursuit, it faces the economic problems of production and distribution, which in unparalleled magnitude, nationally and internationally, the civilized man must solve or perish. To the ambitious it promises power, dignity, and influence as never before in the history of the world. Small wonder, then, that it lures to its ranks the best intellects of the coming generation. The great institutions of learning have recognized this situation and are establishing carefully planned schools of business administration with facilities for study and investigation of all the lines of information likely to fit men to grapple with large undertakings. The making of business books has become a business, and their sale reaches to all parts of the civilized world. There are now competent specialists and teachers of salesmanship, of advertising, of personnel work, of business organization and of every other branch of business effort. Business is becoming a cult, a high calling, almost if not quite a profession.

What will business do for the race when it has drawn to itself the best intellectual material, trained specially to solve the economic and sociological problems of production and distribution of commodities? The effect on the whole social structure is likely to be far-reaching. The cycles of alternate advancing prices and increasing production and overproduction and the resulting crises and periods of depression, should disappear when business men are more farsighted, better versed in economics, and in consequence business becomes less a scramble for indi-

vidual gains and more a phase of social service. The production and distribution of the commodities by which we all live can be wonderfully bettered if handled by men of wider knowledge, and larger aims. The finances of the world and its exchanges are susceptible of great improvement, if those who control them are competent to solve the problems they present. The age-long conflict between capital and labor may give place to an adjusted co-operation when enough employers are men of broad views and wider sympathies. This better and broader education, this more thorough training for commercial life, is essential to a comprehension of the vital relationship of business to the welfare of the world. In this direction lies a solution of some of its greater problems. Among the many discouraging features of the present economic situation, the growing recognition of the higher business ideals, and the intelligent organization of the training and education of men for business leaders, gives at least one bright and inspiring vision of what may be in the days to come.

SUBSIDY VS. TARIFF

The American people are about to try the virtues of a higher tariff in an effort to solve the present economic difficulties. It is of the essence of a protective tariff that it selects certain industries that, owing to labor costs and other conditions, cannot be operated here as cheaply as elsewhere, and imposes a tariff sufficient to so increase the price of the foreign commodity as to make it possible for the American manufacturer to sell as cheap or cheaper than his foreign competitors. It is difficult if not impossible to adjust this protective tariff so equitably that it does not give the American manufacturer more protection than enough to enable him to underbid the foreign maker. In fact, when a tariff law is under consideration each interest affected brings overwhelming pressure to get the highest possible rate. No one can tell with any accuracy how much more than is necessary we really pay our tariff beneficiaries.

In view of this abuse of the principle, it has been argued that all rates should be fixed by a board of impartial experts with power to change these rates from time to time so as to give only enough protection to enable the industry to make a fair return, and not so much as to favor the growth of monopoly and profiteering. The difficulty here is to get a board of experts who are so skilful as to be competent to fix a fair rate, and so far removed from a personal or friendly interest in any protected industry, as to leave no suspicion of favor shown to any one manufacture more than another.

If the principle of the tariff is correct, it means that the people of the United States are willing to stand a certain loss in order that certain industries may be developed and carried on by our own citizens. The tariff is a cumbrous, costly, and uncertain method of attaining this end. Would it not be simpler and more direct to adopt the method proposed for the encouragement of American shipping? As conditions are, it is certain that, unaided, our citizens cannot profitably engage in ocean transportation. It is therefore proposed that the government shall by means of a subsidy sufficient to make up the loss entailed, aid those who are willing to go into the unprofitable business of building and operating ships under the American flag. If this method is adopted it is possible to know exactly how much we pay to have an American merchant marine. This idea to a business man has some appeal. If it is worth while to

have American shipping, it is worth paying for it, and the same is true of every other industry worth protecting. But just how much we pay should in each case be known.

As stated, under our usual protective tariff it is not possible to even approximate the cost of a protected industry to the American people. If we frankly undertook to make up to those who conduct industries that cannot be made profitable here the loss so incurred in order that a fair manufacturing profit may be made, and no more, the amount needed could be ascertained from the books of these industries, and the rate of profit could be made the same for all protected industries. Then there would be no suspicion of favored industries, and any pressure brought to bear at Washington would be solely on the general rate, thus doing away completely with the present series of fights for special favor. Also, if this were done, the country as a whole could know each year just how much was paid in cash to maintain each of the unprofitable industries, and knowing just how much it costs, the whole matter could be handled with an intelligence, an effectiveness, and an economy that is not now possible.

EMPLOYERS AND EMPLOYEES

Times change and with them the relations between employer and employee. In the old days if laborers were maimed or crippled by the accidents of industry, they were left by the wayside to be cared for by charity or the poor authorities. It was always expected that there would be a supply of waiting applicants upon which to draw as needed. If demand slackened, factories were shut down and the hands turned adrift to find work if they could where none existed.

In the labor market both labor itself and public opinion have rebelled at the disregard or abandonment of the injured and infirm, and we have compensation laws, old age pensions, and various other devices to ease the hardships of the system. There is also a growing sentiment against turning the employee adrift when demand slackens. It is hard, though, for the employer to change his attitude towards labor and, as a rule, unless compelled by law he feels no responsibility for the laborer save to pay for his time when it can be used to a profit. When the profit ceases the laborer is discharged.

* * *

The present coal strike is a protest against exactly such conditions. It was to the interest of the operators to have a large working population settled about the mines that could be called upon for labor when the mines were in operation and discharged when it was not profitable to operate. So far as can be judged from the outside this is the situation that caused the whole trouble. The men and their families have to live the whole year, whether working or otherwise. The operators wish to pay them for the time they work and have them ready whenever they are wanted. Under such circumstances, the workers demand that the wages paid be sufficient to average a living wage for the entire year. From the workers' point of view this is not unreasonable. From an economic standpoint it is preposterous. Firemen and soldiers have to be kept the whole year regardless of whether their services are needed in order to have them ready when and if the emergency arises, but such a system cannot be adopted in competitive industries.

* * *

The remedy is obvious, but foresight and initiative are required to put it into effect. Farmers met this condition

and have had to exercise this sort of foresight. A farmer has certain seasonal work that must be done when the time comes. There are also multitudinous jobs that can be done at convenience. The successful farmer is the man who so orders his work that there is the least possible loss of time. In cold weather, in wet weather, and in dry weather, particular things can be done if there is intelligent planning. The development of this businesslike and economic foresight in ordering and planning farm work is the reason why so many country boys have graduated from the farm to become business men of the first rank.

What farmers have been forced to do, coal operators and other seasonal employers must also come to. The miners must have sufficient to live on the whole year, but the community cannot afford to pay them enough for mining coal half a year or three-fourths of a year, to keep them in idleness for the rest of the year. In those mines where operations cannot be kept up steadily, other work must be found or initiated, possibly less profitable work, to make the miner's total income a living wage. This may be difficult, but it should be the responsibility of the man who owns a coal mine, as it always has been the responsibility of the man who owns a farm.

* * *

The proposed solution comes to this, that the employers should consider themselves responsible for their employees for their whole time. Not only the workers but the community as a whole is vitally interested in this matter. In our country, at this time, any able-bodied man, skilled or unskilled, can earn enough for what is vaguely called a living wage, if he has work all the year round. The wage-earner is not by position and capacity able to secure this continuous employment for himself. The employing classes can secure it for him by using their economic leadership and control of resources. It is now recognized that the employer is responsible for every man who is injured in the industry he controls. It is equally possible that in another generation the employer will be held responsible for their employment for their whole time. Such an arrangement would have these advantages:

1. Unemployment, though it would still exist, would be negligible.
2. Labor turnover would likewise be negligible.
3. The wealth of the country as a whole would be enormously increased by the elimination of idleness.
4. Such continuous employment might well mitigate the hostile attitude of the labor unions.
5. Employers would be much more cautious of increases in their working force, and this would tend to prevent overproduction and its accompanying evils.
6. Only the more capable and farsighted employers would be able to do business under such conditions, and this would stabilize all business, and better the economic condition of the whole country.

REVIEWS OF BUSINESS BOOKS

INDUSTRY AND HUMAN WELFARE

By William L. Chenery. Industrial Editor of The Survey. Introduction by Edward T. Devine. xii, 169 pp. The Macmillan Company

Reviewed by Hugh Mercer Blain *

The executive who wants a practical book for the solutions to the problems arising out of the conflict between capital and labor need not go to the expense of adding this book to his personal library. Its author is not writing any prescriptions for industrial diseases. The executives, on the other hand, who want an intelligent résumé of the forces which have been producing the present industrial situation will have to look a long time before they will find a better volume.

But the author is much better prepared than I to outline what he hopes to accomplish in his volume. Says Mr. Chenery:

> I have endeavored first to describe the condition of the American people during those years when factories were but prophecies. In doing this I have been actuated by the belief that it would be difficult to understand the results of the factory system until the way of life of those who came before the industrial revolution had been envisaged. In piecing together this picture of the condition of the people at the beginning of the nineteenth century I have utilized the researches of many students. Where references would seem to serve the purposes of readers I have in footnotes indicated my authorities. The sources used have been both primary and secondary. Chief reliance has been placed in the historic government reports and in the monographs of various students.

Later Mr. Chenery adds:

> In making this study many inviting by-paths have been crossed. American industrial history is richly suggestive. Unworked fields are many. One of the most promising is a study of the hazards which working people historically have encountered. A fruitful chapter of such a work would recount the fortunes of the debtor prisoners. The change from a system of imprisonment for debt to public insurance against the hazards of industry measures a social revolution. Of necessity this matter had to be excluded from detailed consideration. Other questions of equal and even of greater importance have had to be pushed aside. Among the most tempting of these is the problem of the migration of people which has followed the progress of factories. The population of the country has been redistributed by industrial need. An agricultural people has been moved to towns and cities. A wide range of issues has been created by the shift. Congestion, transportation, housing, recreation, community organization are some of the unanswered questions occasioned by the movement of people from the country to the city in response to factory demand. Consideration of these matters would, however, lead too far afield from the proper limits of this book. So, too, the alluring questions of industrial control have been avoided. These are germane to the central problem of stating the consequences of the rise of the factory system upon human welfare. The question of space has again been imperative. A brief volume cannot infringe upon the prerogatives of an encyclopedia. Industrial government with all its related problems, so charged with significance for the future of society, has accordingly been avoided.

The pivotal point of the first chapter is the saying by Goethe: "Whatever one desires in youth one has in age in abundance." In other words, the chapter traces the development of the factory system in the United States for the past 125 years. The chapter concludes with the following paragraph, quoted in this connection because it sheds light upon the introduction of women and children in the work of the factory:

> The employment of women and children was universal during the years prior to the establishment of the factory system in the United States. From the very beginnings of this country women and children had worked. That

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their toil was limited to the home and to agriculture and to domestic industry was merely due to the fact that there were no other opportunities for employment. The belief current recently that the establishment of the industrial system drove women and children to work is without foundation. The mechanical revolution changed only the kind of work done. The fact of work itself was assumed. In any effort to recall the social and economic background of the industrial system in this country it is vital to remember this. A farmer could hardly hope to live without the co-operative employment of his wife and children.

Chapter II describes the rise of industry in the United States, while Chapter III takes up the worker's family. One of the most interesting features of these two chapters will be found in the quotations from colonial newspapers. To illustrate conditions in the last decade of the eighteenth century, Mr. Chenery inserts the following item from *The Connecticut Courant* of that period:

> My parents were poor and they put me at twelve years of age to a farmer with whom I lived until I was twenty-one. My master fitted me off with two suits of homespun, four woolen shirts, and two pair of shoes. At twenty-two I married me a wife, and a very good young woman she was. We took a farm of forty acres on rent. By industry we got ahead fast. I married my eldest daughter to a clever lad to whom I gave one hundred acres of my out land. This daughter had been a working, dutiful girl, and therefore I fitted her out well and to her mind: for I told her to take the best of my wool and flax and to spin herself gowns, coats, stockings and shifts—nay, I suffered her to buy some cotton and to make into sheets as I was determined to do well by her. At this time my farm gave me and my whole family a good living on the produce of it and left me one year with another one hundred and fifty silver dollars, for I never spent more than ten dollars a year which was for salt, nails, and the like. Nothing to wear, eat, or drink was purchased as my farm provided all—with this saving I put my money to interest, bought cattle, fatted and sold them and made great profit.

Somewhat statistical in character, but interesting in spite of that fact, is the chapter giving the wages in industry for the period covered in the book. Practically the same comment might be made of the chapter which follows, as it lists somewhat in detail the hours devoted to labor in American plants.

The chapter that ought to provoke the most thought is that devoted to regularity of employment. A single quotation will indicate the trend of the chapter:

> Unemployment and the fear of unemployment are twin evils created by the factory system. Industry destroyed man's old sense of safety, and in the United States little has been done to make good this great loss. The possibility of being workless and without income hangs over the great majority of wage earners. The factory worker of today knows only a fractional part of the trade he pursues. He knows little else that he could turn to account. He must live by his trade or not at all. In order to obtain employment he must ordinarily reside in congested cities, where the possibility of subsidiary means of support are denied him. Usually he does not own the house or the tenement he lives in. He neither cultivates nor harvests the vegetables and fruits which his family consumes. If he is able to eat eggs or to drink milk he obtains these articles from dealers who are themselves far removed from the scene of actual production. His clothes are bought, not made at home. The modern factory worker must retain his job if he wishes to continue alive, and yet he knows from bitter experience that at recurrent intervals, regardless of zeal or fitness, many men and women will not be employed. His constant question is "Am I next to go?" That condition, unemployment and the more harassing dread of unemployment which it engenders, are among the most serious reproaches which the conscience of humanity must level at modern industry.

The chapter most open to criticism on the score of being meager and jejune is that in which Mr. Chenery all too briefly takes up the hazards of industry. The concluding chapter naturally discusses the present status of the workers. According to Mr. Chenery the humblest workers enjoy all the political and social rights of the richest and most potent industrial magnate, but his economic status, especially if he is an employee of a large corporation, is not one of independence. While the chapter tells little that is new it does remind the executive of many things which in the struggle for a market he is prone to overlook.

To supplement this book the reader will do well to review the article on "Wealth—

Its Use and Control" by George E. Roberts, Vice-President of The National City Bank, published in *Administration* for January 1921. What is sadly needed at the present time is not destructive but constructive criticism. A more equitable distribution of wealth is unquestionably desired, but one should have a clear idea of just how much money workers would get if the wealth of this country should be in some way distributed equally among all men. The point that should not be overlooked is that the place to measure wealth is at the point of consumption and not that of distribution. The present industrial system is not something which employers have forced upon workers, but it is a system which has been a growth of which more and more the worker has come nearer getting an equitable distribution of the profits of the factory. No one will question the soundness of the assertion by Mr. Chenery that factories were built to increase human welfare. How to accomplish that in a greater measure is not made clear, but Mr. Chenery points out that his aim has been to trace the development of industrial problems and not to offer solutions.

THE NEW WORLD

By Isaiah Bowman, Ph.D. Illustrated with 215 maps and with 65 engravings from photographs. vii, 632 pp. The World Book Company, Yonkers-on-Hudson, New York.

Reviewed by Malcolm Keir *

"History," someone has said, "is geography in motion." To many men the word "geography" raises a mental image of a large book full of varicolored maps, and pictures of strange places or folks, with a dull text bearing no relation to life, the whole work useful only to conceal in study periods small, lively, but forbidden books. The idea that such geography could ever be in motion or have any relation to history seems ridiculous. Yet no observant person could have lived through the last 10 years without having seen geography in violent motion, creating thereby much matter for future historians to set in order. That economic geography is a basic factor in political history, some geographers have declared for scores of years, and many historians have long since recognized the truthfulness of the assertion. The rapid growth of industrialism during the last century and a half has emphasized the value of the earth's scattered raw materials together with the strategy of possession or control of the channels of trade on land or sea. Farms, mines, forests, and fisheries have become the prizes of peace or war, while rivers, railroads, canals, and sea lanes are the arteries carrying the life blood of the world. Mountains and plains, deserts and swamps, ice and jungles, have attained increasing significance as they have furthered man's economic projects, or impeded his progress.

This new geography is not so much concerned with establishing a science as it is with using its researches to aid men to live. The earth in its relation to *man* is the dominant modern geographic gospel. One of the great teachers of this vital geography was Nathaniel Southgate Shaler, a professor at Harvard, and the inspirer of a group of younger men who are now amplifying his work. The contemporaneous group is composed of such men as Ellsworth Huntington, Walter Sheldon Tower, J. Russell Smith, George Roorbach, and others. In this group, a giant among giants, stands Isaiah Bowman, one time professor of geography at Yale, more lately director of the American Geographical Society of New York. To an already well-equipped mind, Dr. Bowman has added the exceptional opportunities that came to him recently as the chief territorial adviser of the American Commission at the Paris Peace Conference,

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at which he was also the executive officer of the Division of Territorial, Economic, and Political Intelligence.

An understanding of the foregoing is necessary for a balanced appreciation of Dr. Bowman's latest book, "The New World." Concerned with present world problems in their economic, political, and geographic phases this work supplies the facts which, acted upon wisely, may make democracy safe for the world. That this was in the mind of the author is evidenced from the following quotation:

In an autocracy a very small political group may take the most fateful decisions respecting peace and war. In a democracy the citizen participates in this grave task. It is, therefore, the paramount duty of all citizens who wish to see our civilization preserved and advanced, to know the peoples about them, their problems, their desires, their resources, their possibilities, and their spirit—in short, the political and geographic as well as the historic and economic bases of their life. Yet such information concerning the different peoples and countries of the world is often hard to come by, and its interpretation usually requires an acquaintance with the sources of knowledge that few people possess. *The New World* is designed to provide for the average citizen the background of information that is necessary to understand the main international questions of our time and to follow their development.

At another place the author says:

Whether we wish to do so or not we are obliged to take hold of the present world situation in one way or another. Though that situation is based upon a group of international problems of extraordinary complexity, opinions respecting these problems must in many cases be translated into immediate action on the part of government executives. In an autocracy the people are asked to accept unquestioningly the judgments of officials reputed to be wiser than they; in a democracy like ours we periodically ask the voters (suddenly doubled in number by the extension of the suffrage to women) to express an opinion and commit the government to a policy.

No one can contemplate our relation to affairs with equanimity in view of the state of political education in the United States. Our hitherto domestic point of view, our century-long and uninterrupted success in territorial expansion, the high and false values set upon material wealth, even our view of party politics and the responsibilities of party leaders, all alike increase the difficulties of a time beset by perils of a new order.

To grasp the full meaning of questions which involve other powers that like ourselves have patriotic pride and the means to defend their honor, requires something more than native common sense and a willingness to deal fairly. For these questions have a geographical and historical setting and require scholarly consideration. It is to the roots of wrong that the voters and the constructive statesmen of our time must address themselves. In England and France the government leaders can depend upon a body of specialists and experienced administrators. In America we have never had a trained and permanent foreign-office staff; and however lofty our intentions, we work, so far as scholarship goes, on administrative principles little different from those of a hundred years ago.

In fulfilling the obligation imposed upon himself the author divides the world into its principal problem areas. Since the chapters are determined by the areas, a list of the chapter headings will indicate Dr. Bowman's conception of the localization of the problems. The headings are as follows:

1. Problems of Imperial Britain.
2. Political and Colonial Aims of France.
3. Belgium as a European Focus.
4. The Italian Situation.
5. The Democratic Drift in Spain.
6. Portugal's Colonial Policies.
7. The Scandinavian Countries and Holland.
8. Railway and Territorial Problems of Switzerland.
9. Problems of the German People.
10. The National Existence of Austria.
11. The New Hungary.
12. The Domain of the Czecho-Slovaks.
13. Jugo-Slavia and the Adriatic.
14. Rumania within Its New Frontiers.
15. Bulgaria under the Treaty of Neuilly.
16. The Albanian Mountaineers.
17. The Reunited Greek Lands.
18. Poland and Its Disputed Borderlands.
19. Lithuanian Development and Relations.
20. Land Tenure and Trade Outlets in Esthonia and Latvia—The Former Baltic Provinces.
21. Finnish Problems in Their Geographical Setting.
22. The Political Geography of Russia.
23. Constantinople and Its Thoroughfare.
24. Palestine: A Jewish Homeland under a British Mandatary.
25. Anatolia: Last Remnant of the Turkish Empire.
26. The Mountain Home of the Kurds.

27. The Transcaucasian Peoples.
28. Persia in Relation to British Interests.
29. Inner Asia: The Unsettled Land of the Nomad.
30. The Far East.
31. The Pacific Realm and Australia.
32. African Colonies of the European Powers.
33. Latin-American Trade and Boundary Disputes: Relations to the United States.

Each chapter so far as possible follows the same general outline. The geographic, economic, religious, and political setting for the problems are first given in detail. Upon this background there is painted in broad strokes the picture of events of the past, especially those that led up to or through the World War. There is then superimposed a minute drawing of the problems within the area as they came before the Paris Peace Conference together with the settlements arranged by that body. The factors that influenced the decision in each case are given, and an evaluation made of the decree in its potentiality for future peace or war. If colonies, dependencies, or mandataries were involved in the subject matter of the chapter, these are discussed separately from those things that directly relate to the principal governments. Each chapter is lavishly illustrated by maps and photographs which usually are as fully illuminating as the text itself. In fact, if the book contained nothing but these maps with their accompanying comments the work would have been received with acclaim. Throughout the book the political effects from geographic causes are set in high relief.

When one has finished reading the book one has supplied to oneself the fundamentals requisite for an intelligent answer to the questions raised by the world's entrance upon a new era. Dr. Bowman states these questions in his introductory chapter as follows:

Whatever the faults of the old world, it was at least what a business man would call a "going concern"; can the new world be set going in an orderly manner?

How much of the old world is left?

What new boundaries, concessions, colonies, mandataries, spheres of influence, and protectorates now appear on the map of the world?

What kind of people compose the new states?

Will the new democracies survive—in Poland and Jugo-Slavia and Austria, for example—or are some of the experiments in self-government likely to fail?

What elements of economic strength and weakness has each of the new states, and also each of the old states whose resources have been either increased or diminished by treaty?

The large and powerful states—the "great powers"—have from this time forward, a new set of rights and responsibilities. How will these responsibilities be met?

Will the strong states administer their colonies or protectorates in the interest of the natives?

Could the grip of the large "western" powers be loosened without anarchy following in the "protected" or "occupied" regions of the world, like Egypt (British), Santo Domingo (United States), Morocco (French)?

Can the terrible burden of armaments be reduced by common agreement?

Has the day of deliverance come for the oppressed minorities of the earth, those who have hitherto been persecuted because of differences between themselves and the majority or ruling class in race, religion, or social customs?

How far can the protection of minorities be carried? Can the so-called minorities' treaties stand, or do they threaten the integrity of the unwilling signatory states—Poland, Czecho-Slovakia, Rumania, Jugo-Slavia, and Greece?

Will strong nations continue the struggle for trade privileges, raw materials, and strategic zones, with the prospect of war between them if they cannot realize their commercial and political ambitions otherwise?

In short, will the changes in the political and economic geography of the world spell peace or war, strength or weakness, in the years immediately before us?

Foreseeing that his book might whet an appetite for further reading upon the subjects it discusses, the author furnishes a limited but valuable bibliography for each chapter, collecting them all for convenient use at the end of the work. There is also an appendix giving the principal international treaties and agreements for the years from 1814 to 1920. These are codified for easy reference.

Dr. Bowman admirably performs the task to which he set himself. There are few men, however well versed, who could not gain by reading the book. To the person with limited opportunities for arriving at such facts as are dealt with in the book, this work should prove invaluable. As a

book of reference also the work should make a place for itself. Doubtless future historians will use it as a source for ascertaining the ideas that were current immediately at the close of the World War and upon entrance into the New World.

Nevertheless, the book is open to adverse criticism. It was printed in the United States, and probably was intended primarily for home consumption, yet our own problems are given scant space and the bearing of alien problems upon ourselves is lightly touched. On the contrary a man might be excused for believing the book was written by a Britisher for the British. In this statement no derogation of the British is intended. Furthermore, although the book will be read and praised for the facts set forth, few would give it attention for the interest aroused by its style. The sentences are either long and involved or jerkily short, with the result that the book does not flow easily and evenly. Also that the presentation of facts may be made dramatically, the author seemingly does not realize. To supply support to these accusations the following quotations are submitted:

It is customary to lay the blame for Hungary's plexus of evils upon the treaty-making powers at the Peace Conference of Paris; but it should be remembered that the prime causes of evil are the accumulations of centuries—oppression of non-Magyar peoples by Magyars, a medieval system of land tenure long discarded by France and Great Britain, a strangle hold upon the peasant (Magyar as well as non-Magyar) of the commercial system of the town, managed by powerful merchants, mainly Jews.—Page 219.

For hundreds of years the ruling class in Hungary has been the Magyars. Who are they? Whence did they come? They are a steppe people, originally a race of nomadic horsemen, who conquered the grasslands of the middle Danube basin about 895 A.D. They have always been a plains people and have left to others the bordering highlands. In the period of their early development in the grasslands of Hungary, they repeatedly ravaged Europe from mid-Russia to westward of the Rhine.—Page 220.

Poland's history is largely the history of her landed nobility; Bohemia has been historically a land of peasant farmers, like Austria.—Page 240.

Justifiable as the Revolution of 1917 proves to have been, Russia is in a most unfortunate condition today because, in changing from one autocracy, that of the Czar, she has fallen into the hands of another autocracy, that of the Bolshevists, whose leaders, like the three wise men of Gotham, have attempted to go to sea in a bowl:

"Whither in your bowl so free?
To rake the moon from out the sea."

Bolshevism is the rule of society by a class, the "proletariat"; its methods destroy property—they do not create it. It has done more harm to Russia, materially and spiritually, than the World War did. Many of the most intelligent people, including teachers, doctors, and lawyers have been killed. Thousands have fled to France, Great Britain, and the United States. Many others have been so long underfed and terrorized that they have no spirit left for a new time of peace and order, even if such a time should come soon. The actors, the writers, the investigators, are spiritually dead. For years to come these men will not produce a great play, a great novel, a great newspaper, a great university. Bolshevism has meant a step backward toward the barbarism of earlier times.—Page 387.

It (Constantinople) has profited little from the rapid development of Black Sea lands during the past hundred and fifty years. Southwestern Russia, in that period, was transformed from a pastoral to an agricultural realm, rich in cereals. Cities grew marvelously; industries sprang up; oil and manganese were exported in large quantities. From 70 to 90 per cent of the total exports of these products went by way of the Straits.—Page 409.

But in just the proportion that these lands became economically strong, Constantinople—the gateway of southern Russia—gained in political and military importance. For centuries it was one of the settled aims of intelligent Russians, as well as of Russian rulers, to gain possession of the city; and religious motives were added to commercial reasons: Constantinople was the city from which Russia got her religion.—Page 310.

The old Jewish Pale of Settlement in Russia, east of which Jews could not settle, was designed to segregate him.—Page 420.

Like the United States, she (China) has lands spread from the subtropical south to the temperate north, and in spite of her great population, in places dense, China has undeveloped territories capable of settlement, as in Mongolia and Manchuria.—Page 515.

The printer, too, did Dr. Bowman valiant disservice. Letters, especially "i" and "l," are missing from words throughout the whole work, broken type disfigures some part of nearly every chapter, and alignment both of lines and margins was apparently an

unknown art at the World Book Company press. Since an author or his agents always has an opportunity to correct such faults when proofs are submitted, the press alone should not shoulder the blame attached to poor printing. Inasmuch as Dr. Bowman is himself an editor, it is difficult to supply a reason—except haste—why he should let his own work appear before the world in such slovenly dress.

In citing these matters one should not becloud the real worth of the book. That stands out conspicuously, while the errors are relatively trivial. At the beginning of an era when fancies should be separated from facts, this book is a most valuable aid in establishing the facts. It should be on the desk of every man wrestling with the problems that are the inheritance of the New World.

THE MANAGEMENT AND THE WORKER

By George F. Johnson, Arthur H. Young, Wm. E. Mackenzie, W. S. Rogers, M. R. Lott, F. N. Macpherson, and others. 228 pp. A. W. Shaw Company

Reviewed by Joseph W. Roe*

Sometimes the spirit of wisdom is confused by a multitude of witnesses, and this book suffers from its composite authorship. It is apparently a compilation made from articles of uneven merit which have been published elsewhere and brought together here; and consists chiefly of statements by men who have had experience with various forms of employee representation. Some of these statements are excellent, crisp, and suggestive. Some make one wonder whether they were presented as models or as horrible examples.

The preface states that the general plan of the book is to give, for those who face the problems of employee management, descriptions and an analysis of methods actually being used and proving successful. As a statement, more or less fragmentary, of methods, the book fulfills its purpose; but it gives no comparison of results, nor any general analysis of the problem. When one compares it, for instance, with the Research Report on Works Councils, published by the National Industrial Conference Board, which digests the experiences of over 200 companies, he is conscious of the difference between careful, discriminating analytical work and the more or less hurried editorial compilation here. As a textbook for a student this book has little value. For the experienced manager, able to sift wheat from chaff, there are scattered through it a great many valuable suggestions.

The first three chapters deal with the principles relating to the human factor in business, and the building up of a labor policy. Chapters four and five outline the labor policy and personnel organization of the Endicott Johnson, and the International Harvester Companies, from which much of value can be gathered. Then follows an interesting statement of the experience of a small newspaper publisher. After this there is a chapter devoted largely to the speech of a small manufacturer at a meeting held with his workmen. One wonders whether this may not have been included as an example of how *not* to handle workmen. It seems unusual for the president of a company to devote a large part of his talk at the distribution of the profit-sharing checks, to a prolonged scolding on such pinhead details of waste as take up two pages in the book. Waste in small things is no small matter, but most good executives would have handled it in a very different spirit.

The original Whitley report to Parliament in 1917 is then given essentially in full. This document has been of such great influence, it is a pity that little is given

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beyond merely quoting it. Less than three pages are devoted to the wealth of experience which English industry has had with this plan.

After this there follows a miscellany of statements of various employers covering their experience with, and solution of, labor problems. Here, as in the first part of the book, there is a feeling of "hodgepodgeness."

In Part II there are two chapters, one on "The Functions of a Labor Department," and one on "Methods that Help in Hiring," which are detailed, constructive, and well worth while.

The last chapter without any adequate explanation is devoted to analysis of a toolmaker's job, and the book closes so abruptly that the Saturday evening reader instinctively looks for the line saying that the subject is "continued on page—."

INCOME TAX PROCEDURE

By Robert H. Montgomery, C. P. A., of Lybrand, Ross Brothers and Montgomery. xxi, 1911 pp. The Ronald Press Company

Reviewed by Carl C. Plehn*

This is a new, up-to-date edition of a well-known handbook on the income tax. So rapid is the march of events in the income tax world that taxpayers' manuals, like the the red-covered travelers' guide books which tourists carry, must be constantly revised and brought up to date. We have had during nine years five different federal income tax laws, beginning with that of 1913. In many respects, all five of these laws are still in effect, coexistently. Judicial interpretation of these laws by the courts in minor and major points has been made in hundreds of cases, and new cases are arising daily. Administrative interpretation of the same laws has been given by the Treasury department in thousands of individual "decisions," "rulings," "opinions," "memoranda," and "recommendations." New rulings are published at the rate of about a dozen a week. Only a few of the taxpayers' returns of past years have been audited and approved officially and there are innumerable grounds on which they may be criticized and amended. New treasury rulings are in many cases retroactive in effect and for that and other reasons reports of past years may have to be revised and the amount of the taxes recomputed. To find his way through all this the average taxpayer needs an up-to-date guide book just as a traveler needs the latest Baedecker.

There are a great many income tax handbooks on the market and the taxpayer may well be puzzled to know which is the best for his particular purpose. So an attempt to classify this book may not come amiss. There are books on the income tax written by lawyers, which seem to serve other lawyers very well, when advising their clients on legal points. There is a group of books on the income tax written by "tax experts" who are either in the government employ or in private practice. These which also have a large clientele deal mainly with the technical side of the tax. Montgomery's book is written by an accountant and is designed primarily to meet the needs of the bookkeeper, the company auditor or general business manager who has to prepare the data in the first instance for the lawyer or for the tax expert. The book contains enough of the legal lore of the income tax to serve every practical purpose of the accountant and enough of tax technique to make it seldom necessary to call in an "expert." The author does not have much knowledge of the history or theory of taxation nor of the broad questions of political and social policy involved. Expressions of his views on those

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subjects are, however, very few and are not part of the main text, nor are they, of course, necessary to the making of a correct tax return. Montgomery's task, as he conceives it, is the practical one of telling the taxpayer what to do, what must be reported as taxable, what may be omitted, how much must be paid, what the taxpayer's rights are, few though they may be, and how one may try for redress if he thinks he is wronged. In short the book is written for the business man, not for the scholar. At the same time it should be of use to the lawyer; for, in income tax law, cases turn on "questions of fact" more often than on refined "points of law."

Most taxpayers have discovered that the greatest difficulties they encounter in making out their tax returns arise in determining what is "income" in the more or less arbitrary and peculiar sense in which the law defines "income" for purposes of taxation. After that the ascertainment of the law or of the rates which apply and the computation of the tax is a very easy matter. The determination of "net taxable income" is obviously primarily an accounting problem, hence the advice and instruction of an experienced accountant is a thing very much needed. Colonel Montgomery is not only an experienced and accomplished accountant but is also, exceedingly rare among his fellows, a clear and lucid writer. Sure of himself, even to the point of being opinionated and dictatorial, he seldom fails to make his point clear, and to state it so that anyone the least bit conversant with accounts can understand him. This is highly important because neither the income tax law, the regulations, nor the rulings are lucid or clear. In fact one may be sure to strike a responsive chord in most taxpayers by the following paraphrase of Bret Hart's immortal characterization of the Heathen Chinee:

> That for ways that are dark,
> And for tricks that are vain
> The Income Tax Law is peculiar.

To describe in a brief review a book of 1911 pages packed full of technical details one is forced to resort to the method of sampling. It is not easy to guess what a person who is considering whether he wants to buy or read the book would want to find in it. So we shall select one or two things we imagine some taxpayer might want to find, and assure him that in all probability any other point will be similarly covered.

Suppose you want to find out whether it is better for your wife and yourself to make separate returns or a joint return. By reference to the table of contents or perhaps more quickly to the excellent and comprehensive index you are directed to pages 76 and following. There you find set forth in full each and all of the possibilities allowed by law and numerical examples of the principal ones. If the examples do not approximately fit your case the general statements enable you to make the adjustments easily. You find here also exactly under what conditions and how the "credits," that is the personal exemptions and the allowances for dependents, may be used, whether by the husband alone, or in part by the wife as well.

Again, let us suppose you learn for the first time that you are living in a state where the community property law prevails, and you have not in past years taken advantage of the reduction in tax which is dependent thereon. How much are you entitled to recover and how may you proceed to get redress? Montgomery answers all these questions.

You have a friend, an Englishman, who has been in this country on a business trip and made some money. He asks you whether he has to pay income tax. You look in Montgomery and find out all the particulars even as to how your English friend may supply himself with a "certificate of compliance" so that he need fear no impudence from the Irish inspector on leaving port.

To take up a more difficult point, the so-called income tax is a tax on gains and profits as well as on income. You may have been forced by circumstances beyond your control to readjust your investments. Perhaps the bank in which you have owned stock for years has consolidated with another bank, and hence you have had to take back your money and put it into new securities. What taxes, if any,

are due? Does the bank have to pay them if the consolidation took the form of a sale of the bank's assets, or do you? or do both have to pay? You may argue that the increase in value of your original investment made 20 years ago has been taxed as part of the gradually accumulated profits of the bank, that you have paid and expect to continue to pay taxes on all the real income earned. Yet there is that troublesome tax on gains and profits as well. Moreover, you have read that Congress provided in the new law for a lower tax rate on "capital gains" and that a mere exchange of one piece of property for other property of like use may under certain circumstances involve no taxable gain. All these Montgomery explains at least as far as the rulings of the Treasury are conclusive.

These few samples must suffice. In conclusion it may be said that the reviewer has had occasion to make extensive use of the volume under review and of its predecessors by the same author, in connection with both practical and theoretical studies. He has found no material errors nor found it lacking on any essential point which falls within the broad field that the author sets out to cover.

SCIENCE AND COMMON SENSE IN WORKING WITH MEN

By Walter Dill Scott, President of Northwestern University, President of the Scott Company, Philadelphia, President of the American Psychological Association, Author of "Influencing Men in Business," etc.; and M. H. S. Hayes, Member of the Scott Company, Philadelphia, formerly Psychologist, Laboratory of Social Hygiene. ix, 154 pp. The Ronald Press Company

Reviewed by Marion La Mere *

Granting that industry is built for the man, not man for the industry, the problem facing the executive today is to know his man, that he may judge his fitness for the industry.

Personnel administration, then, is the keynote of this volume which sets forth the problems existing between the employer and employee, and offers a scientific solution based on common sense. According to the authors:

> The idea of modern personnel administration can be summed up in four words: Know your men better. When this suggestion was made to the president of a large automobile factory he replied with considerable heat, "Know my men better? I can go out into the plant and call every man there by his first name." Perhaps he could, but he had nevertheless failed to grasp the idea. Knowing a man by his first name and knowing his history, his education, his special training, his particular machine or tool aptitude, his ability to supervise and train others, the ease with which he learns this kind of work as against that, his interests and motives—these are two entirely different things.
>
> They are different because one is superficial and the other is fundamental. Knowing the name of every man in your plant is a remarkable feat of memory. It is a valuable social asset. But it is not knowing a man—it is knowing his name.

With the growth of industries, it is no longer possible for an employer to have an intimate knowledge of his employees. He must choose personnel executives, capable of dealing justly with men and furthering their interests. Although:

> The hard boiled employer, like the poor, we have always with us, . . . the best of progressive employers are today coming to realize that in the careful study of man and jobs there is commercial benefit to be derived in the way of increased production, decreased turnover, and heightened morale.

The first point considered in the scientific adjustment is the measuring of physical capacities. The result removes the possibility of assigning a man to a job where he would be a misfit or even do himself an injury. Jobs should be rated according to the required qualifications, and

*Special reviewer for *Administration*.

the persons physically handicapped should be placed in berths for which they may be fitted. Employers will find that the disabled workers form a highly dependable group.

The examinations also point out the men having special qualifications for particular jobs. For instance, work demanding exceptional strength, unusual rapidity, special need of motor co-ordination, ability to resist extremes of temperature or a hypersensitivity of some one of the special senses.

After the physical, come the mental tests, and here the authors utter a word of warning against the so-called "psychological systems" which may tend to disqualify a man because of the shape of his upper lip or the curve of an eyebrow.

The trade test, which measures a man's ability on his job, is described at length, with added descriptions of the Münsterberg test, the tests for abnormal children, and the mental tests of the United States Army, modified to meet industrial needs.

These tests, although objected to in some instances on the ground that they waste valuable time and that they subject the employee to possible ridicule in case of a poor showing, are nevertheless of great advantage to the worker in case he is forced to stand for his rights against an unscrupulous employer. They also serve the employer as a means of classification and adjustment.

To estimate the intelligence required for different jobs, stenographers, bookkeepers, clerks, and messengers were given mental tests. The scores were arranged according to occupations and the averages obtained. The cases of those failing to make the standard were investigated, bringing to light the influences which prevented a person from giving his best work.

Another problem is that of training in industry. The old measure of letting a man learn on the job has proved to be a waste of time, material, and energy. "Some form, then, of systematic training is recognized by the progressive employer as both necessary, and, in the long run, economical."

The factory school, which receives pupils of all grades of intelligence, will enable the instructors to classify the employees according to their mental ability. The authors sum the methods, as follows:

> These, then, are some of the ways in which a study of the mental alertness of workers can be of assistance in maintaining a stable, contented, and efficient working force. It will help the employer to pick men. Taken in consideration with a study of the jobs in his organization it will help him to place men. It will help him in training men, and after training, in adjusting them in accordance with their increased efficiency. Finally, as a result of this adequate placement and adjustment, it will help him to keep men in his organization, because of the fact that they are doing work that is within the range of their mental capacities.

In addition to the mental tests are those which classify technical ability. These are adapted from the standardized army trade tests, and have three requirements:

1. To define the grade of skill possessed by a craftsman.
2. It must be sufficiently simple and standard for an intelligent man, unskilled in trade, to make satisfactory use of it.
3. It must be short and easily given.

These tests measure the skill which a man actually has in the task at the present time. They do not prophesy anything of future development.

Next comes the most important and unmeasurable test, that of rating character qualities. The chief problem is in the selection of department heads, and for that the authors have devised a graphic rating scale, for gauging foremen and other executives. This chart is illustrated in the volume. The advantages of its use are described in the following:

> The method of applying a quantitative rating scale to these seemingly unmeasurable qualities serves, first, to force superiors really to analyze their candidates in terms of the qualities that are essential to success in the position, and to record their judgments in black and white. This serves to keep the man doing the rating from making snap judgments without proper study or knowledge of the person he is rating. It serves also to lessen the effect of personal prejudice which unconsciously often so distorts a man's opinion of another that he is willing to call him a "rotten foreman" when all he really has against him is that he lacks initiative or has a pug nose.

A man should be judged also by his history; industrial, educational, and personal. The industrial, to ascertain the trade skill he may possess so that he may be in line for any advantageous opening; the educational, that his ability to understand written instructions or to do constructive work may be appreciated and rewarded; the personal, that the employer will be enabled to consider the nationality, environment, and stability of a worker, in order to make a satisfactory adjustment between the man and the job.

In answer to the question, "Why does a man work?" several motives are listed. The economic motive with its urge for money; the creative instinct with the personal desire to accomplish a finished product; the desire for authority which spurs a man to qualify as boss; the competitive appeal inspired by the rivalry for a maximum production or promotion; the social instinct, and desire to fraternize; the prestige of certain kinds of work for social approval, and the incentives of pride, justice, and sympathy as demonstrated by years of faithful service.

Chapter XI on "Creating Opportunities," contains a list of "musts" for employers, ranging from fitting the job to the worker and ascertaining the worker's viewpoint, to making the admission that there are jobs that hold no promise of promotion, that are in fact "blind-alley" jobs.

The conclusion rings clarion clear:

> When management comes to realize that labor is not a compact mass from which it indiscriminately chips off blocks to fill its gaps, but that it is rather an aggregate of disparate, distinct, and ever-changing individuals, it may come to devote the time and effort necessary for an adequate adjustment, and for its own ultimate salvation!

E. H. HARRIMAN—A BIOGRAPHY

By George Kennan. Two volumes. xxiv, 842 pp. Houghton Mifflin Company

Reviewed by Hugh R. Conyngton*

When a writer of proved ability, such as George Kennan, takes for his subject a man of remarkable achievement such as E. H. Harriman, a striking and interesting biography is to be expected. In this respect the two volumes in which Kennan pictures the career of Mr. Harriman are in no way disappointing. It is but seldom that the life history of a man of business contains so much of action and of an interest that frequently becomes dramatic.

Mr. Kennan's viewpoint is not strictly impartial. This may have been inevitable, but the picture of Harriman that Kennan wishes to give would perhaps have been better given by an entirely non-partisan presentation. Practically all of Kennan's material statements are based on known facts or documentary evidence, and Mr. Harriman was a man of too great, and on the whole, commendable achievement to require more than a fair presentation of the facts. He had, of course, his faults, and made his mistakes, but he was a leader in his field, did great things, and will rank high in the history of American transportation.

As pictured by Kennan, Harriman was singularly indifferent to public opinion as it affected himself. This indifference is surprising, since a man and his work are seldom separated in the public mind, and one of Harriman's keen perceptions should have appreciated the fact. When he was striving to accomplish something in the field of action—as, for instance, when he was thwarting the efforts of the Kuhn-Loeb committee to reorganize the Union Pacific Railroad—he employed the press with vigor and effectiveness. When, however, he was personally attacked, he rarely deigned to defend himself. As a result public opinion was against him many times when it should have been with him; he was frequently misjudged, and not only was his own repute

*Chairman of the Board, The Ronald Press Company.

injured, but his enterprises suffered as well. It is therefore part of his biographer's work to place his life and character in the proper light, and as far as Harriman's public life is concerned, the work has been well done.

Of Harriman's vast and far-reaching achievements Kennan has given us a striking picture. For the most part, he leaves the man's personality to be discovered through his achievements. Here and there it breaks through very interestingly, as, for instance, in the following account:

> At a meeting of the Erie Executive Committee one day, a requisition was presented for a comparatively small sum of money—$10,000 or $12,000—to buy mules for hauling purposes in the Company's coal mines. There was a difference of opinion in regard to the matter, and after listening to the discussion impatiently for a time, Harriman said: "If the manager in charge cannot be trusted to buy mules without bringing the subject to the Executive Committee, a new manager should be selected. My time is worth about a mule a minute, and I cannot stay here for the rest of this discussion. I vote 'aye' on the requisition," and then left the room.

Kennan's account of Harriman's early life and his entrance into the railroad field, covering a period of which little has been written, is particularly interesting. He came of good English stock—from men, for the most part, accustomed to having money and to doing things. His father was a clergyman. Harriman's scholastic education ended at the age of fourteen—by act of Harriman himself. Then his training for business life began, first as a messenger boy in a broker's office, then successively as "pad-shover," clerk, and chief clerk. In 1870 at the age of 22, his first adventure was made on his own account as a stock broker and in 1877 he made his entrance into the field of transportation, purchasing a small steamer running between New York City and Newburgh, which was operated successfully for a short time and then sold at a profit.

In 1879 when about 30 years old, Harriman married the daughter of a railroad president, and became a director of his father-in-law's road. The next year saw his first independent railroad adventure, when he acquired an interest in a small railroad some 34 miles long—the Ontario and Southern. Within a few years, the first foreshadowing of his later career, he gained control of this road, reorganized it under the name of the Sodus Bay and Southern Railroad, rebuilt it, and sold it to the Pennsylvania Railroad Company. About this time he began to purchase stock of the Illinois Central Railroad Company, was through the influence of friends elected a director, and shortly retired from the brokerage business to become a railroad man.

The Illinois Central was Harriman's training school, preparing him for the brilliant career that was to follow. His rise was comparatively rapid. "His influence from the first was exerted in building up a policy of improvement and expansion." This was characteristic of the man. "In the first five years after Harriman became director the Illinois Central increased its mileage by about one thousand miles." This was done in the face of unfavorable public comment, but as was the case with most of Harriman's constructive work, it was successful and resulted in largely increased earnings for the road.

It was in connection with the Illinois Central that Harriman first came into public view as a railroad man. At the same time he came into conflict with J. Pierpont Morgan. The Dubuque and Sioux City Railroad was operated by the Illinois Central under a lease which became unprofitable. Harriman, then a leading figure in the Illinois Central, and Fish, its president, wished to make a more profitable arrangement. The Morgan interests owning a majority of the Dubuque and Sioux City stock refused. By taking advantage of technicalities Fish and Harriman not only gained control of the road, but finally forced its sale to themselves at a price considerably below that which had been demanded by the Morgan interests.

As told by Kennan: "To Wall Street the result was a surprise. No one had supposed that Fish and Harriman could defeat Drexel, Morgan and Company when the latter held a clear majority of Dubuque and Sioux City stock." As a result, Morgan conceived a violent dislike for Harriman. "But observant operators in the field of railroad strategy began to regard him with increasing respect."

Shortly thereafter Mr. Harriman was elected vice-president of the Illinois Central, became chairman of its finance committee, and was a dominant figure in the subsequent history of the road.

The Illinois Central, as stated, was Harriman's "training school." It was the bankruptcy of the Union Pacific Railroad in 1893 that gave him his opportunity. The details as told by Kennan are most interesting. The condition of the Union Pacific was desperate; it could not raise money to meet its obligations; the road itself was in a run-down condition; its operation was at the time unprofitable. The Morgan interests had attempted reorganization of the road without success. Kuhn, Loeb and Company, then formed a strong committee and undertook its reorganization. For a time the work of the committee proceeded satisfactorily, but in the latter part of 1896 they "became conscious that some secret but powerful influence was working against them."

Mr. Schiff, who was managing the Kuhn-Loeb committee thought Mr. Morgan must be opposing them. Mr. Morgan denied this, but undertook to find out whence the opposition proceeded. A few weeks later Mr. Morgan sent for Mr. Schiff. "Its that little fellow Harriman," said Morgan, "and you want to look out for him."

Mr. Schiff went at once to Harriman, who readily admitted his opposition, "Because I intended to reorganize the Union Pacific myself."

Mr. Schiff was surprised, but finding Mr. Harriman very determined, thought it better to have him working with them than against them. Harriman was willing, providing he be made "chairman of the executive committee of the reorganized road."

"That is out of the question," replied the banker. Later, however, Mr. Schiff finding the opposition too strong, saw Harriman again and told him "If you will co-operate with us, I will see that you are made a director of the reorganized company and a member of its executive committee. Then if you prove to be the strongest man in the committee, you will probably get the chairmanship in the end."

This was all Mr. Harriman wanted. He joined the syndicate and within a year was chief executive officer of the road, and this in the face of the fact "that he was little known to his new associates, and was regarded by some of them with distrust."

Harriman quickly became the dominant force in the Union Pacific and the history of the road during his administration is one of continued improvement. Grades were reduced; curves were eliminated; the roadbed was ballasted; substantial bridges were built; heavy rails were laid; larger freight cars and more powerful engines were purchased; extensions and connecting lines were built or purchased, and the capacity of the road was greatly increased. The financial management of the road kept pace with its physical development and the Union Pacific from a disorganized "streak of rust and a right of way" became one of the most substantial and profitable railroads in the country. And Mr. Harriman at the same time became one of the most prominent figures in the railroad world.

Mr. Kennan's presentation of Harriman's life is divided into episodes. Mr. Harriman was too active to make any other method practicable. A chronological presentation would have been kaleidoscopic. It was but little more than 10 years from the time of his election as chairman of the executive committee of the Union Pacific to the time of his death.

Of the episodes of this period perhaps the most important and enduring were the reconstruction, equipment, and operation of the Union Pacific and Southern Pacific Railroads; the most ambitious the attempt to girdle the globe with Harriman transportation lines; of most dramatic interest the conquest of the Colorado River in its attempts to flood the Imperial Valley.

Other matters of both interest and importance are the struggle for the control of the Burlington, the break with Roosevelt, the investigation of the Chicago and Alton Railway, the organization of the boys' club, and the relief work in connection with the San Francisco earthquake and fire.

In his description of the contest over the control of the Northern Pacific—through which Harriman hoped to get the effective interest in the Burlington that he had failed to secure in the open market—Kennan clears up one point that has been generally

misunderstood. The Harriman interests were not unseated by an unexpected retirement of Northen Pacific preferred stock. They actually had a majority of the voting stock of the Northern Pacific. A portion of this was, it is true, preferred stock that by action of the Board of Directors might be retired January first of the following year. Also, the Hill-Morgan interests held a majority of the common stock and therefore if the preferred stock were retired would automatically come into control of the Northern Pacific Railroad. All this was, however, well known to Harriman and his friends. They also knew that an election of directors occurred before the end of that year, and as the Harriman interests were in actual control they would be able to elect a majority of this board and presumably be able to block any effort to retire the preferred stock. Harriman's lawyers assured him that this was the case. On the other hand the Hill-Morgan interests were confident that some way could be found to retire the preferred stock and give them the control they felt they were entitled to. In order to avoid litigation and a protracted struggle the matter was settled by a compromise which gave the Harriman interests satisfactory representation on the board of directors of both the Northern Pacific and the Burlington.

Kennan's discussion of the break with Roosevelt shows clearly that Harriman was not guilty of the unlikely, unnecessary, and uncharacteristic expressions of opinion which caused his classification by Roosevelt as an "undesirable citizen," "a wealthy corruptionist" and "an enemy of the Republic." Kennan's defense of the Chicago and Alton financing admits a somewhat doubtful capitalization of invested earnings, and an equally doubtful "cashing in" on the surplus thus created. Kennan contends, however, that what was done was legal, was abreast of the business morality of the day, and that the financial troubles of the Chicago and Alton were due to subsequent mismanagement.

The description of the East Side Boys' Club shows the best side of Harriman. Harriman, then 28 years of age, was invited to visit a girls' club in the neighborhood of Tompkins Square. The matron complained "of the lawless street boys, who teased the scholars and threw stones at the windows of the school." Mr. Harriman asked: "Why wouldn't it be a good plan to have a school, or a club, for the boys so as to get them off the streets and teach them manners?"

This remark was the starting point of the Boys' Club. Mr. Harriman decided to try the club as an experiment and with the friendly assistance of the local police finally succeeded in getting three hesitant boys to meet him and talk over the proposed club.

> Mr. Harriman first surprised them by giving them a lunch of sandwiches and hot coffee, and then laid before them his scheme of establishing a boys' club, where they could meet in the evening for social intercourse and amusement. He did not intend, he said, to open a night school, or a lecture hall. What he aimed to do was to provide them with a place of their own where they could meet one another, play games, and have a good time. The three youngsters, favorably impressed by the coffee and sandwiches, as well as by Mr. Harriman's breezy, colloquial talk, expressed approval of the scheme and said they believed the other boys of the East Side would like it.

And they did like it. And they were the ordinary, mischievous, and often unattractive East Side boys. There was no money in it, and lots of hard work, but its founder stuck to the club until, at first under his personal guidance and later under trained instructors, it grew from a membership of three to over 7000. Meantime Mr. Harriman had become a millionaire and one of the leading railway men of the world.

The taming of the Colorado River in 1906, when it had determined to reclaim its ancient bed—the Salton Sea or, as it is now called, the Imperial Valley—was one of the most striking incidents of Harriman's career. Kennan narrates it in full and interesting detail. In this case the Southern Pacific, under the direction of Harriman, "the enemy of the Republic," and at a cost to the road of over $3,000,000, saved to the nation property values worth hundreds of millions of dollars. In a message to the 61st Congress, quoted by Kennan, Roosevelt thus describes the conditions and the loss that would ensue if the Colorado were not checked.

If the river is not put back and permanently maintained in its natural bed, the progressive back-cutting, in the course of one or two years, will extend upstream to Yuma, as before stated, and finally to the Laguna dam, now being built by the Government, thus wiping out millions of dollars of property belonging to the Government and to citizens. Continuing farther, it will deprive all the valley lands along the Colorado River of the possibility of obtaining necessary supply of water by gravity canals.

The great Yuma bridge will go out, and approximately 700,000 acres of land as fertile as the Nile Valley will be left in a desert condition. What this means may be understood when we remember that the entire producing area of southern California is about 250,000 acres. . . . The entire irrigable area which will be either submerged or deprived of water, in the Imperial Valley and along the Colorado River is capable of adding to the permanent population of Arizona and California at least 350,000 people, and probably 500,000. Much of the land will be worth from $500 to $1500 per acre to individual owners, or a total of from $350,000,000 to $700,000,000. . . .

In the San Francisco earthquake and fire, Harriman was again to the fore, giving his personal services and the facilities of both the Union and Southern Pacific Railways. And his last public service, consummated by Mrs. Harriman after his death, was the donation to the State of New York of the splendid area of wooded hills now included in Palisades Park, aggregating 10,000 acres, together with $1,000,000 in cash for the acquisition of other properties.

Harriman had the vision and the daring of the successful leader; he had the patience, the minute information, and the executive ability of the successful operating man; he was a financier of resourcefulness and ability, and the combination of these qualities, in a period of less than 10 years, made an almost unknown man one of the prominent figures of the railroad world.

In "E. H. Harriman—A Biography" Kennan has given the life story of a man who was always ready to "start something" and then carry it through to success. For the business man the volumes carry a message that is not only of interest but of real practical value.

REVIEWS OF BUSINESS PAMPHLETS

Have You Ever Measured Your Office Output? Published by J. Austin Smith and Company, Industrial Engineers and Accountants, New York.

Beyond the permissibility of a doubt the question asked in the title of this pamphlet is of vital importance to every business executive.

In other departments the yardstick is being continually used and results are known. In the sales department the manager has a pretty definite idea of just what he may expect in a given territory. Quotas are established and salesmen try to reach these quotas. In the advertising department the progressive manager estimates successfully what percentage of business he may reasonably expect from a campaign in the medium selected for the insertion of copy. In the department of credits and collections the manager has his yardstick which is used daily to measure results. Through graphic control the production manager knows what the factory is capable of doing. But in the average office no such condition obtains. Office expenditures according to this pamphlet are charged to overhead because overhead is considered simply as an expense item. For many executives this pamphlet will be an eye-opener in the matter of measuring office output.

To illustrate the points made, incidents are given of which the following is typical:

> In the office of a retail store, employees took from 15 to 20 minutes to get started in the morning, and stopped working 20 minutes before closing time at night, because the porter did not remove the ledgers and working materials from the safe until after everyone was in the office, and started putting them away 20 minutes before closing time. In the general confusion, nobody attempted to start until everything was in readiness. As a consequence, 30 people were idle for 40 minutes a day, waiting on one porter. When the management realized that this arrangement was costing it 20 hours office time a

day, it didn't take long to arrange to have the porter start 15 minutes earlier in the morning, and 15 minutes later at night. This seems such an obvious loss that it might be assumed that the office was very loosely run. As a matter of fact, the office was considered one of the most efficient of retail store offices. It was just one of the things that were overlooked because everyone was so used to seeing it.

The obvious conclusion of the pamphlet is that the purpose of proper analysis and control of units of measurement and standards of accomplishment is as necessary to the office as to the factory or to sales.

Business Books for Profit and Pleasure. By Ethel Cleland, Business Branch, Indianapolis Public Library, American Library Association, Chicago, Illinois.

Abe Marton is reported to have said, "There is only one thing that will mix with business and that is printers' ink." This pamphlet revolves around that point. Its list of books does not claim to be the choicest in the field of business literature but rather it sets forth by way of suggestion some sample packages of some of the best lines to whet the appetite for more.

In its compilation a sincere attempt has been made by Miss Cleland to avoid, first, old books which have outlived their usefulness, and new books which have not yet proved their worth and which seem to advance unbaked theories.

Why the business executive should read such books is given as follows:

Read the books in this little list—and others like them—for profit. That's all right. The more profits in business, the better. But read them also for pleasure—the pleasure of seeing how the other fellow tackles the problem he shares with you.

Read them for inspiration—business literature is a vast experience meeting. Hear someone tell how he managed to turn the tide the way he wanted it to go.

Read them for understanding—whoever helps you understand your fellow men—or yourself, for that matter—better, ought to be your friend for life.

Read them for efficiency—your own and that of those working for you. Let the psychology professor and the expert accountant and the statistics fiend show you their bags of tricks. Ideas in books aren't copyrighted, you know.

And above all read them for breadth and background—no business, just as no person, stands or falls alone. By studying business in the large and being familiar with all its phases and the work of others, you will know your own particular job better.

Read for pleasure, for inspiration, for efficiency, for background, and the balance will show that profit in dollars and cents is not the only profit in business books.

The books are listed under the following titles:

"The Great Game"
"Speeding up Efficiency and Effort"
"Studying the Players and Directing the Force"
"Every Business Has a Beginning"
"Getting the Best Out of the Office"
"Keeping the Books"
"Charting Progress and Results"
"Writing and Talking Business"
"Crying the Wares"
"Selling the Product"
"Giving and Getting Credit"

In the opinion of the reviewer this arrangement is the most logical that could have been selected and while one may think that the pamphlet has sins of omission, he will not, except in rare instances, bring a charge of sins of commission against the compiler of the pamphlet. The phamplet may be obtained from The American Library Association, Chicago, Illinois.

BRIEF ANNOUNCEMENT OF NEW BUSINESS BOOKS

Wealth and Income of the American People. By Walter R. Ingalls. G. H. Merlin Company.

Working With The Working Woman. By Cornelia Stratton Parker. Harper and Brothers.

The Science of Purchasing. By Helen Hysell. D. Appleton and Company.

Factory Management Wastes. By James F. Whiteford. D. Van Nostrand Company.

How to Sell at Retail. By W. W. Charters. Houghton, Mifflin Company.

CHRONICLE AND COMMENT

CONTROLLERS' CONGRESS

The Third Annual Convention of the Controllers' Congress of the National Retail Dry-Goods Association was held in Atlantic City from June 12 to June 15. As is well known, the keynote of this Congress is "Efficiency in Retailing." The program provided for papers on the following topics:

"How the J. L. Hudson Company, using the Retail Method, Keeps its Purchases and Stock Records," by E. C. Stephenson, The J. L. Hudson Company, Detroit, Michigan.

"The Expense Budget in Operation," by William Thomas, Abraham and Straus, Inc., Brooklyn, New York.

"The Preparation of an Advertising Budget," by S. L. Silverstein, The Rosenbaum Company, Pittsburgh, Pennsylvania.

"The Results of Harvard's 1921 Questionnaire, and What We Expect from That of 1922," by Dr. Malcolm P. McNair, Harvard Bureau of Business Research.

"The Relation of the Controller to the Merchandise Manager, from the Point of View of the Latter," by Joseph Mayer, R. H. Macy and Company, Inc., New York City.

"The Use of Statistics in the Department Store," by E. R. Clarkson, Kaufman's Big Store, Pittsburgh, Pennsylvania.

"A Business Barometer for Retailers," by Dr. Horace Secrist, Northwestern University.

"The Future and Further Development of the Controllers' Congress," by E. J. Frost, Vice-President, Wm. Filene's Sons, Boston, Massachusetts.

"What Can the Controller Do to Enhance His Position in His Store?" by B. L. Brown, A. I. Namm and Son, Brooklyn, New York.

"The Education of the Controller," by Dr. Norris A. Briscoe, Professor of Merchandising and Director of School of Retailing, New York University.

"The Financing of a Retail Business," by Mr. Alexander Maurocadato, Franklin Simon Company, New York.

While the association is made up of controllers from the dry-goods stores of the country, the constitution of this organization was amended at this meeting whereby accountants, system men, and others interested in the work can become members without voting power. A committee was appointed to study the subject of the budget after the thorough manner of the Committee on The Standardization of Accounting. The pivotal point around which most of the discussion of the Congress revolved was the matter of budgets. Some of the systems presented in the papers were not considered flexible enough to adapt to quick changes in the sales conditions in sales volume.

OFFICE MANAGERS

The Third Annual Conference of the National Association of Office Managers was held recently in Washington, D. C. One hundred representatives of many of the largest concerns in the country met together to discuss principles of office management, and to exchange ideas looking to the more economical and efficient operation of large offices.

The meeting was addressed by many speakers of note and included such topics as:

"Possibilities and Limitations of Psychology in the Office," by Dr. John B. Watson of the J. Walter Thompson Company, New York.

"United States Budget Bureau and Principles of Budget Making," by General H. M. Lord of the War Department.

"Personnel Work in the Office," by Dr. Charles R. Mann, Chairman of the Advisory Board of General Staff of the War Department.

"Modern Office Planning," by Harry A. Hopf of New York.

One day of the Conference was set aside for a series of Round Table discussions led by authorities on such subjects as:

"Tests for Clerical Employees"
"Office Budget Program"
"Determination of Compensation by Results"
"Procedure for Establishing Standard Practice Routine and Office Manuals"
"Mechanical Appliances in the Office"
"Office Service Departments"

All of this material will be included in the published proceedings of the Conference.

The National Association of Office Managers was formed a little over three years ago to serve as a medium for mutual help-

fulness and a free exchange of ideas on the office manager's problems. The officers of the Association are:

President, F. L. Rowland, Gilbert and Barker Manufacturing Company
1st Vice-President, G. R. Hulverson, Burroughs Adding Machine Company
2nd Vice-President, L. E. Stacy, the Spirella Company
Secretary, G. S. Childs, Alexander Hamilton Institute
Treasurer, C. W. Kirkpatrick, The Fisk Rubber Company

BUSINESS COMMANDMENTS

Bindery Talk, house-organ of Gane Brothers and Lane, publishes "Ten Commandments of Finance" which Prof. Charles Gerstenberg, Head of the Department of Finance at New York University has compiled. "They appear to contain such a wealth of common sense," says the editor, "that we reprint them."

1. Don't engage in a new business until you have made a careful, unprejudiced estimate of its capital requirements and of its chances of making money.
2. Don't try to raise money until you have demonstrated your ability to use it.
3. Take all available means for acquiring all the capital you and your business can profitably use.
4. Don't engage in unprofitable side lines.
5. Don't count your profits until you've repaired your capital.
6. Keep your property on the firing line.
7. Keep enough cash on hand to meet emergencies and to seize opportunities.
8. Don't be penny wise and pound foolish.
9. Watch your investment eternally.
10. Know when to quit.

SALES TALK

A clever sales talk in *Royal Breezes*, published by the P. A. Geier Company is entitled: "Are you Afraid of Bears?" The theme of the article is taken from the cover which shows a vivacious young girl playing chummily with a huge brown bear. The thought behind the little chat is that most of the things people fear are imagined, or they have been taught to fear.

A salesman fears to start out on a "cold canvas" because he fears the turn-downs and snubs, the weariness of trudging from house to house because he has been told that it is a difficult job. He starts out with the conviction that he is going to meet trouble—and he generally does.

The little squib draws its conclusion from the girl on the cover who, not fearing the bear, is able to caress it. "The bears which scare one in business are really not half so dangerous as they seem. So long as you *let* them scare you they are powerful," says the editor, "but as soon as you show them no sign of fear, they'll be as tame as the bear on the cover."

SAFETY FIRST!

"Safety First Thoughts" is a feature that is being more and more emphasized in employees' magazines. *Mead Co-operation*, published by the Mead Pulp and Paper Company devotes several pages to safety first thoughts both in the plant and in the home. This publication is also printing a series of health talks which the Life Extension Institute compiled.

The Telephone Review of the New York Telephone Company illustrates "safety first and always" with a series of photographs of accidents absolutely avoidable if the employees will be a little more careful. The photographs are particularly harrowing, having been taken after accidents occurred.

The loss from accidents is handled rather cleverly in *The Broke Hustler*, house-organ of the Abitibi Power and Paper Company. In an article deploring the appalling loss from accident, the statistics of a safety engineer are quoted estimating the cost of an accident to every individual. Thirty-five dollars is the amount put on every person in the United States. For each million of population the rate of accidental death is 860 compared to Ireland where it is 395, Japan 446, England 452, and France 447. The pivotal point in this survey is that every man pays for the accidents of others in a consequent loss in his pay envelope since someone must pay for this tremendous toll to carelessness.

Accidents are treated in *The Walworth Craftsman* in a very frank manner. The days are numbered during the year in which not a single accident happens.

When an accident does occur, the details are openly published in the magazine so that every employee in the plant may safeguard himself from a similar occurrence.

The case in question has to do with an employee who was wearing the wrong shoes while working in the foundry. A photograph showing the shoe and the piece of iron that cut into the shoe illustrate the article.

WASTEBASKETS

There is an excellent idea in the frontispiece of the current *Kodak Salesman*, published by the Eastman Kodak Company. Because the squib is short, it is quoted *in toto.*

> Before the day of the cyanide process millions in gold remained in the quartz that went to the ore dump, because no one knew a profitable way to extract all the metal.
>
> Every day the wastebaskets of the country receive thousands of ideas, valuable to the people who dump them there. This waste is deliberate, avoidable.
>
> Magazines, booklets, window cards—manufacturers spend millions on this material to help their dealers sell their goods and it ought never reach the wastebasket until every ounce of usefulness has been extracted from it.

CREDIT CONDITIONS

The Monthly Review of credit and business conditions in the Second Federal Reserve District, issued by the Federal Reserve Agent of the Federal Reserve Bank of New York ought to be monthly on the desk of every business executive. It may be sent to the desk for the asking and even a slight annuity would be wisely spent for this review.

The Monthly Review covers credit conditions, illustrated with charts and graphs, savings bank deposits, likewise illustrated, bill market, commercial paper, stock market money rates, stock clearing operations, bond market, United States Government Securities, Foreign trade, etc.

The concluding article in the June number is an extract from an address delivered by W. P. G. Harding, Governor of the Federal Reserve Board, before the Southern Wholesale Dry-Goods Association at Birmingham, Alabama, on "Credit, Currency and Business." The editor recommends that everyone who can lay their hands on *The Review* read the extract.

BUSINESS ETHICS

In industrial circles a book entitled "Working With the Working Woman," by Cornelia Stratton Parker is attracting considerable attention. This book which will be reviewed in the next issue of *Administration* by a competent reviewer consists for the most part of several magazine articles describing the author's experiences as she worked with the working woman.

The question has been raised whether an industrial investigator has a right to quote the opinion of workers without special permission. It is claimed that interviews with executives are not quoted without permission and that employees should enjoy the same courtesy.

In her article dealing with her experiences in the "Bleachery" at Wappinger Falls, Mrs. Parker did not hesitate to quote the opinions of fellow workers. Her article when it first appeared in *Harper's Magazine* brought a sharp rebuke in *Bleachery Life*, the employees' magazine of the "Bleachery." Consequently, the following letter from her may be of interest on the ethical questions involved in quoting directly the speech of employees.

> Cavi di Lavagna, Italy
> April 27, 1922
>
> Mr. Jas. Melvin Lee
> Editor of *Administration*
> New York
>
> *Dear Sir:*
>
> I am in receipt of a letter from you asking my opinion of the ethics involved—or lack of ethics involved—in quoting the personal conversation of an employee without special permission. This all in regard to an article of mine in *Harper's Magazine.* You mention your own remark to an executive, that you wouldn't think of quoting him in print without his special permission.
>
> The broad ethical statement could be made that no one should be quoted on any subject without permission of the person quoted. The result of that would be that many individuals would be much more comfortable than they were or are, but the rest of the world would be minus a good deal of valuable information on which opinions or actions must be based. When a person speaks "for publication," what he has

to say is of only minor value compared to what he says when he is telling you what he really thinks. Personally, however, under no circumstances would I feel free to quote an opinion of any moment expressed to me in private without permission.

Two qualifying statements here: I should feel justified in quoting a statement, provided it was not told me in confidence, ("In private" and "in confidence" being two different things. I used the expression "in private" meaning conversation where I was the only audience, as against an utterance heard by numerous others at the same time) if in quoting I did not use the name of the person quoted. There are many cases where the opinion expressed is of more value than who expressed it.

Secondly, I should make a distinction between quoting statements of importance, concerned with a man's position, say, and statements of no importance, such as whether he did or did not like Charlie Chaplin, or whether he liked to dance or not.

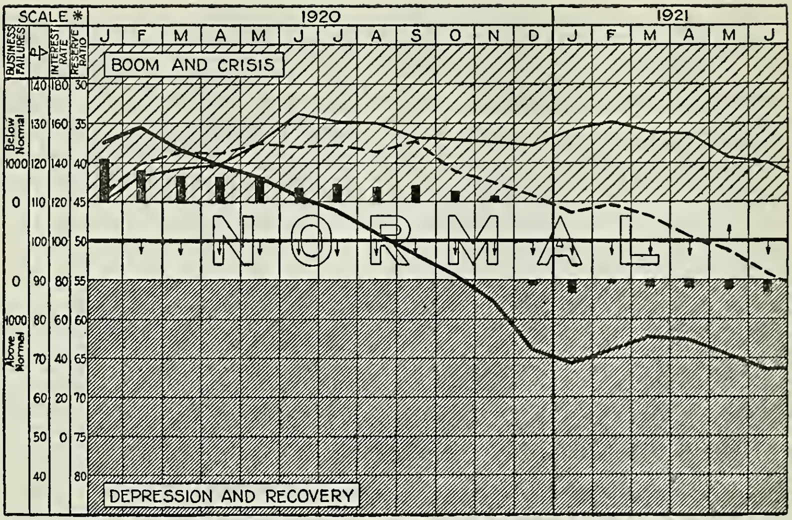
If a person is hoping to shed the least ray of honest light on factory psychology, if such a term can for the moment be used, and starts with the idea that no employee will be quoted without permission, the investigation would be comparatively useless. It would be made in an absolutely artificial atmosphere, and little of value would be spoken. Also, as anyone knows, no employee would agree to publicity where the statement quoted was not to his credit. It is more than the difference between an honest straightforward picture, as a man really looks, and the same picture, retouched until every line, every slight blemish, is removed. Who willingly gives untouched photographs to the press? But how a man actually looks is of minor importance as to how he really thinks.

The only way out of the difficulty, as I see it, if an investigation is to be made, is to quote as honestly as possible just what people say when they have no idea they are to be quoted, but not to use the correct names in quoting. In my own articles I changed every name, with the exception of the article you mention. I started to change the names there; then I thought, "these girls know each other so well, every opinion quoted was expressed openly before a group, there was nothing to bring discredit upon anyone quoted, why go through the labor of thinking up and using some such name as 'Annie' when the girl's name was really 'Mary'?" If ever anyone in the factory should read the article, she would know at once that it was Mary I was talking about anyway, and to the outside world, for whom the articles are written, what is the difference between Annie and Mary? I may have used four correct first names, the rest I changed. However, the number is immaterial. The fact remains that, just as most of us object to having the public see a photograph of us untouched, so also we seem to object to any quotation of ideas which shows us honest and human with a few wrinkles under the eyes, a slight blemish on the left cheek. Indeed we prefer not to have our picture taken in everyday clothes at all, but in the one best dress we own, or "draped" in a piece of gauze belonging to the photographer. If we wear glasses every day, we take them off for the picture. So it is, evidently, with our ideas. If we wish to see how mankind really looks, and not how mankind wants to look, print honest pictures. Let no names or false names be under the pictures. The fact remains that if the person photographed is unlucky enough to stumble across the picture in print, no matter what the name underneath it, she is going to feel outraged. . . . If one is going to write factory articles to please each employee mentioned, the articles might just as well not be written. . . . I still hold to the statement that a writer should not quote the personal conversation of an employee without permission, with the qualifications mentioned.

In my own case, nothing that has happened to me since I have been earning my own living has made me feel so very badly as to learn how the employees at the "Bleachery" took the article I wrote about them. I would not have hurt one of them for anything. I left the Falls with sincere regret, looking forward to the time when some streak of luck would bring me back again. I corresponded with several of the girls, their letters always the height of friendliness. Then suddenly appeared their criticism of my article and me in their paper. It simply took my breath away. The article was "simply rotten." It showed up what sort of a person I was, "a lady with tigers claws," and intimated what would happen to me if I ever appeared in those parts again. Since then, naturally, I have not heard from a single girl. I have read the article over until I am sick of it, trying to see what could have caused all the agony, but I give up. There is little in it to make anyone jump with joy and say "Hooray that's me she's talking about!" I suppose the unfortunate part of it is that anyone at the "Bleachery" read the article. I feel miserable about the whole thing. However, if I had to write the article over, there is only one remark I would change. For the sake of my personal reputation at the Falls I am not going into the business of "retouching." I wanted to show factory life in a small town as honestly as possible. Personally, I should not call the result "simply rotten."

Sincerely,

(Signed) CORNELIA S. PARKER.



**Note on Scale:* Failures—Number above or below normal; $\frac{P}{V}$ Line—Index number; 100 equals 1912 rate;

THE BUSINESS TREND—A BAROM

Prepared by Lewis H. Haney,

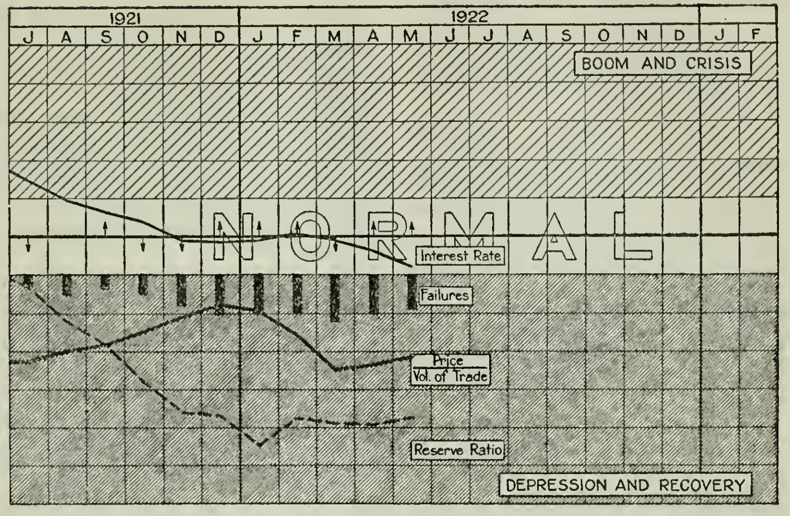
EXPLANATION OF BAROMETER

The trade barometer shown above was devised by, and prepared under the direction of Dr. Lewis H. Haney, Director of the New York University Bureau of Business Research. It is designed to indicate the *trend* of industrial conditions. It shows the present condition of business considered as part of a general movement or cycle and therefore reveals *tendencies* as to the future. It is based upon the idea that while no barometric device can serve as an absolutely positive forecaster — for the reason that tendencies may be counteracted by unforeseeable developments—nevertheless, an analysis of certain fundamental factors accurately shows present conditions, and that by observing the trend of these factors the probable future can be traced.

A business barometer has two values, So many variable and even conflicting factors exist in business that a elear indicator of the net situation has great importance. In addition, the barometer is based on factors which have real barometric sensitiveness to business change and thus give the earliest certain indication of future trend.

Three areas are shown on the barometer: The shaded upper area of "Boom and Crisis;" the unshaded middle area of "Normal Conditions;" the more heavily shaded lower area of "Depression and Recovery." The barometer is so constructed that when business is in the stage either of boom and expansion, or is moving downward in the early stages of crisis, the curves and vertical bars are in the upper area. When the general business condition is that of depression or the beginning of recovery, the curves and bars are in the lower area.

The light line shows the course of the



Interest Rate—Index number; 100 is based on 5 per cent; Reserve ratio—Actual figure; scale inverted.

ETER OF INDUSTRY AND TRADE

Director, New York University Bureau of Business Research

interest rate on commercial paper, with adjustment for normal seasonal variation. It is based on an index number, 100 equaling 5 per cent. The dotted line shows the federal reserve bank ratio of cash reserves to note and deposit liabilities, *the curve being inverted* so that an increase in the ratio causes a fall in the curve. The heavy line shows the relation between the price level (Bradstreet's index number of wholesale prices) and the physical volume of trade (carloadings). The bars projecting above or below the normal zone indicate the movement of business failures (Dun's). If the number of failures is normal for the month it is not indicated; if the number is above or below normal it is shown. Bars projecting above the "normal" area, therefore, show a smaller number of failures than normal, and bars projecting below show an excess of failures over normal. The arrows pointing up or down from the center line of the normal zone show by their direction the course of a special six-commodity price index, the commodities chosen being those which are peculiarly sensitive and accurate indicators of price trend.

The barometer is based on the most significant factors which can be tabulated closely up to date and which can be logically correlated with industrial conditions. Each factor has a logical and fundamental bearing on industry and can be explained in terms of cause and effect. The several factors are as follows:

1. *The Interest Rate.* The rate of interest on commercial paper has long been recognized as furnishing a correct index of demand and supply for capital. It throws an important light on the funds available for speculation.

2. *The Federal Reserve Ratio.* The ratio of the cash reserves of the federal reserve banking

system to note and deposit liabilities is especially significant for the speculative market. When the reserve is greater than normal and is increasing, there is generally a tendency to increased speculation. The ratio shows the degree of expansion or contraction of credit.

3. *The* $\frac{P}{V}$ *Line.* This factor expresses the relation of the general level of prices to the physical volume of trade. When prices advance faster than the physical volume of trade, business tends to boom, and vice versa.

4. *Business Failures.* One of the best indexes of business conditions with a barometric value is the number of business failures. Rarely, if ever, is there a business depression which is not preceded by a period of expansion with an abnormally small number of failures. Rarely, if ever, is there any recovery from business depression which is not preceded by a decrease in the number of failures.

5. *Special Six-Commodity Price Index.* This index is based on the average monthly prices of pig iron, copper, brown sheeting, silk, cottonseed oil, and wheat. These commodities have been chosen as those which best serve to indicate the trend of prices in general. They also have been found often to indicate in advance the general trend. The price of wheat is adjusted for normal seasonal variation.

With regard to these several factors it has been assumed that there is a certain range which may be called "normal." It is not believed that one can say positively that any single figure is exactly normal, but it is believed that figures above or below a certain range may be considered abnormal.

The normal range of the interest rate on commercial paper is considered to lie between 4 and 6 per cent. In other words an interest rate above 6 per cent is considered to indicate an unusual degree of stringency, while a rate below 4 per cent is abnormally low. The normal interest rate is somewhat doubtful owing to changes caused by the war and it may be that the interest curve is placed somewhat too high on the chart with relation to the other curves. This cannot be finally determined for some time.

The normal range of the federal reserve ratio is taken to lie between 45 and 55 per cent. This range is necessarily based upon a study of a limited period of time and may have to be revised when the federal reserve banking system has had a longer history.

The normal level of the $\frac{P}{V}$ Line is taken to be that which existed during the year 1912—a year which is considered more normal than any recent period.

The normal number of failures per month has been estimated by considering the number of failures in a long series of years, and each successive month an allowance is made for a normal increase.

The method of reading the barometer is as follows:

In general, when the lines or vertical bars rise above normal, a period of boom and expansion is indicated. If the lines or columns are below normal, they show a period of depression and contraction. Rising lines or bars in the upper area show approaching danger. Falling lines in the upper area show crisis. When the lines or bars are in the lower area of depression and are falling, contraction and liquidation are still on, and the bottom has not yet been reached. When rises occur in the lower area, however, business recovery is indicated. With business normal, the curves should all lie within the normal area, and no bars showing excess failures should appear. An increase or decrease in the commodity price index is indicated by the direction of the arrows on the center line, and shows the tendency of the general price level.

For example, in February 1920, the height of the failure bar above the normal area indicated approaching trouble, and the rise of the interest rate and the federal reserve ratio above the normal area showed danger. The $\frac{P}{V}$ Line was about to decline, indicating the peak of the boom period. The price decline began. Obviously, the approach of a period of business contraction was clearly indicated.

In June, 1921, we find the federal reserve ratio approaching the sub-normal area. Failures had become abnormally numerous. The $\frac{P}{V}$ Line had reached the bottom, and the interest rate was rapidly falling, with prices still showing a downward tendency. Clearly no immediate recovery was in sight.

In preparing the barometer, the normal seasonal variations have been allowed for in all cases. That is, the figures have been adjusted to allow for the fact that the time of the year affects them as well as the general condition of business. Allowance has also been made for "normal growth," or "secular trend" as it is sometimes called. For example, there is a steady increase in the actual number of business failures from year to year, simply on account of the country's growth. The normal number for 1920 would not be normal for 1925. A minute examination of the chart will show what is meant. In the year 1920, the number of failures was *less* than normal.

In the case of the interest rate, the introduction of the federal reserve banking system has stabilized conditions and one-half of the old seasonal variation has arbitrarily been taken as the normal. This appears to be the best that can be done until more time has elapsed under the new conditions.

It will be observed that the curve showing the movement of the federal reserve ratio and the bars showing failures are inverted. That is, as the figures increase, the curve and the bars move downward, and vice versa. This is done in order that the barometer can be read as shown without any change or transposition in the mind of the reader.

THE CURRENT BUSINESS TREND

The barometer shows the course of business conditions up to June 1. In May at least two factors indicate improvement. These are:

1. Failures
2. Prices

The number of failures, after allowing for seasonal variation and normal growth, has steadily decreased since March. The six-commodity price index moved up four points in May. These things indicate, respectively, recovery from depression and better profits in business.

The interest rate, after allowance for normal seasonal variation, shows a marked decrease. From this fact it may be inferred that the supply of funds is still considerably in excess of current business needs. This tends to maintain speculation, but shows that the prospective recovery in business has not gained much headway.

The foregoing condition is emphasized by the reserve-ratio curve, which shows the ratio of cash reserves to note and deposit liabilities, allowing for normal seasonal variation. This line, after moving up in February, has held fairly steady with some minor fluctuations, which indicates a continued liquidation in some sections of the country. There has recently been a decrease in deposits. Business recovery has not been sufficient to find much reflection in banking statistics, and in most sections financing has been based on a liquidation of inventories and a collection of slow accounts rather than on bank loans.

The reserve ratio curve generally gives a correct indication of credit and speculative movements, and it may be inferred that its continued low level shows that the peak of the speculative advance in the stock market had hardly been reached in May. When this curve cuts the lower line of the normal area on the downswing, an upward movement of the stock market is generally to be expected; and when it turns up and approaches the normal area again, a break in the stock market is probable.

An important development in the bank reserve ratio is the reduction of the spread between high-reserve and low-reserve territories. On June 1, 1921, the lowest reserve was 40 and the highest was 70 per cent, a spread of 30. On May 3, 1922, with a minimum of 60 and a maximum of 18.9 per cent, the spread was 21.9. On May 31, 1922, the spread had been reduced to 19.9, as a result of further liquidation in the southern and western territories. The minimum reserve on the last date was 65.6 per cent. This movement indicates an equalization and stabilization of credit conditions, which when completed will mark the establishment of normal business.

The $\frac{P}{V}$ Line, after reaching the bottom in June 1921, has been fluctuating with a slightly rising trend. No sharp or marked industrial improvement is to be expected until it assumes a steady upward movement and enters the "normal" area.

In addition to the foregoing barometric

factors, attention should be called to the gradual reduction in unemployment in the country at large and the gain in physical volume of trade. Both debits to individual accounts at banks, and railway carloadings, have shown increases which indicate the existence of a growing total volume of business transacted. These things are good signs.

Another important indication of increased volume of production appears in an increased employment in factories. The United States Department of Labor reports an increase of 3.2 per cent for May, based on 1428 firms.

* * *

Down to June 20, the trend of business shown in May was maintained. Among the fundamental factors shown in the barometer, data covering recent weeks are available for the interest rate, federal reserve ratio, prices, and failures. Although there is normally a small decline in June, the interest rate on the best double-name paper holds firm at 4¼ per cent, making it seem possible that the bottom has been reached. In the two weeks ending June 14, the federal reserve ratio declined slightly, but this is a seasonal movement having little important significance; and the same may be said of failures. As the prices of all but one of the six commodities covered in the price index have averaged higher in June than in May, it is safe to say that the final June index will show a further gain.

The increase in railway car loadings has continued into the week of June 10, when the number was greater than in any recent year except 1920. The volume of merchandise and miscellaneous freight increased steadily, and, were coal traffic normal, the total traffic would be equal to that of 1920.

The chief drawback to complete industrial recovery lies in the labor situation, and particularly in the coal strike. It is likely that the crisis in this matter will be reached soon. Already the first indications of a shortage are beginning to appear.

ADMINISTRATION

The Journal of Business Analysis and Control

AUGUST, 1922

THE BUSINESS OUTLOOK

BY JOHN T. HOLDSWORTH*

BUSINESS continues to gain in volume and in stability. Certainly from the low levels of a year ago marked by lethargy in industry, maladjustment of prices, unemployment, and business instability, a decided advance has been made in the general business situation. And despite certain retarding factors the situation which has steadily improved in the first half of the year gives reasonable promise, barring some unforeseen disturbance, of continued and perhaps accelerated improvement for months to come. The effects of the readjustment of prices from war-inflated levels to a more normal basis, of the reduction of costs and wages, of increased production and consumption, and of profitable employment of labor and capital are cumulative and should confirm confidence in the reality of the business revival already well under way.

These increasing evidences of business revival should not be mistaken, however, for assurances that business in general has become normal—if indeed there is any such thing as "normal" business—much less that a business boom is in sight. In some lines of industry, as, for example, the automobile business, there has been a quite remarkable, even sensational, recovery in recent months, while the bull market in stocks of the same period forecasts business improvement ahead. But it must be understood that upon the basic consideration of the volume of production and distribution we are still far below normal, and many perplexing difficulties obstruct the road to prosperity. Another hectic boom such as we had two years ago, and from the ill effects of which we are still suffering, would be a calamity. Surely no sober-minded American business man would willingly invite a return of that sort of "prosperity." We in common, with the rest of the world, have been awfully sick, and convalescence takes time. It cannot be hurried much. Better, infinitely better, that recovery should be "slow but sure" than that artificial stimulation should create a false sense of strength and security only to be followed by a relapse and a long painful period of hospital treatment. Undoubtedly the pulse of business is stronger and steadier. The widespread pessimism of a few months ago has given place to an optimism that is sane and justifiable, and though busi-

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ness psychology does not admit of precise measurement, the fact that it is now strongly favorable to business improvement should do much to sustain the marked trend toward economic recovery.

In this trend one of the most significant features is the steady increase in industrial production with a continuous advance in prices. The country's purchasing power dammed up for so long has begun to run strong again, and the consumptive demand is keeping pace with increased production. In its national summary of business conditions for the month of June, the federal reserve board notes not only an increase of production in finished manufactures and in basic industries, but also that the retail trade for the first time in many months exceeds that of a year ago. Reports indicate that aside from the voluntary unemployment due to the textile, coal, and railway strikes, general employment conditions have greatly improved. Indeed, in some lines such as steel and the building trades an actual scarcity of labor has developed. Increased consumption at home has taken up the slack of a reduced effective demand for our goods abroad.

In considerable measure, however, agriculture holds the key to the door of business prosperity for the next few months. "As fares the farmer so does the nation," remains fundamentally true. And agriculture has been undergoing a real revival. Despite the break in grain prices of a few weeks ago the average farm price of all crops including animal products has been well sustained, and the farming industry as a whole when contrasted with the low price levels of last year shows striking improvement. As this article is being written (July) the prospects for a good crop and for its marketing at prices above those of last year are excellent. A good yield at fair prices in this, our basic industry, will do much to establish a sound basis for the expansion of related industries such as manufacturing and transportation, and to insure the continuance of national prosperity.

II

Next in economic importance to agriculture stand the great agencies of distribution, the railways. Taking into account the interference of the coal strike and the (at this writing) threatened strike of the railroad shopmen, the showing made by the roads in the last few months is little less than remarkable. Despite the practical stoppage of hard coal shipments and the movement of soft coal from non-union districts only, car loadings for the whole country in June stood at practically the same level as when the coal strike began. The slack was taken up by heavy increases in merchandise freight which reflected increased business activity throughout the country.

In view of the fact that over 300,000 freight cars and 13,000 locomotives are in bad order or unfit for heavy service, this increase in merchandise traffic has stimulated the railroad managers to provide new facilities against the time when coal will be moving again and the heavy seasonal freight movement sets in. To cite a single example, the New York Central has asked authority to spend 37 million dollars on sundry equipment. Indeed, barring the remote possibility of a serious tie-up by the strike, the outlook for the railroads is better than for years past. The wage reductions made by the labor board will help materially, and, in the long run, will largely neutralize the effects of freight rate reductions by the Interstate Commerce Commission. Through economies in operation net earnings have increased in recent

months though gross earnings are less than for the corresponding period last year. Slowly railroad losses are being turned into gains; steadily the roads are working back toward profitable operation with the reasonable certainty that, despite all the handicaps imposed upon them by the exigencies of war, they will again demonstrate, if unchecked by fresh restrictions or radical legislation, the wisdom and the public advantage of private ownership and control.

The iron and steel trade continues to show strength based upon increased buying by the railroads, the automotive trade, the construction industry, and the oil fields. Mills which operated on a 30 per cent basis a year ago are now operating at 75 to 85 per cent, with tin plate mills running at capacity. At the beginning of the coal strike on April 1, the mills were operating at an annual rate of about 35,000,000 tons, while in June the rate increased to over 38,000,000 tons, and this in the face of the most extensive coal strike in the country's history. In July it was reported that many mills were unable to accept orders. The tonnage of unfilled orders of the United States Steel Corporation, after almost continuous declines since the summer of 1920, has risen steadily in the last four months and now stands well above 5,000,000 tons.

The increased output of automobiles has already reached the proportions of a boom. In the month of May the total production of all makes of cars and trucks was 252,167, an increase of more than 50 per cent over May of last year, and considerably in excess of any previous month's production. Manufacturers of some of the popular cars are making plans for a considerable expansion of productive capacity. The tire industry, which but a few months ago was in the doldrums, and also the various automobile accessory trades, are again flourishing. This apparently insatiable demand for automobiles, especially for low-priced pleasure cars, is an evidence of the restored purchasing power of the country.

III

Still another industry of basic importance in supporting values, the building industry, which suffered a long and deep depression during and after the war, has been enjoying a revival of boom proportions. According to the reports of the F. W. Dodge Company the volume of building construction for the first five months of this year exceeded 1 billion, 352 million dollars, over 60 per cent above the corresponding period of last year, while building permits for this period reached the highest level in the history of the country.

The banking and credit position of the country today is very much safer and sounder than anyone would have dared to hope a year ago. Our total gold holdings now exceed 3 billion dollars, an increase of nearly 700 million dollars in the past year. Nearly two-thirds of this gold is held within the federal reserve system where it serves its most effective purpose as a reserve and as a basis for the issue of federal reserve notes. This heavy accession of gold, however, is the result of world trade disturbance and the derangement of international exchange, and should be regarded as of the nature of a "trust fund" to be released gradually to European countries when they are ready to re-establish the gold standard. The reserve ratio of the federal reserve banks combined, which a year ago was about 57 per cent, has stood of late between 75 and 80 per cent. Rediscounts by member banks at the federal reserve banks on July 1, were 623 million dollars as against 1 billion, 803

million last year and 3 billion, 479 million at the peak. Federal reserve note circulation has been reduced 1¼ billion dollars from the high mark in 1920. The federal reserve system is in an impregnable position, while the banking situation at large is strong and flexible. Though the banks, speaking broadly, have shown conservatism, not only in the financing of foreign trade but also in the domestic commercial field in order to insure needful liquidation, the possibilities of credit expansion of the entire system are such as to give complete assurance of ability to meet fully all legitimate demands in the anticipated period of renewed business activity. The heavy credit burdens which the banks were compelled to carry during the "frozen loan" period, when nearly all products and commodities suffered heavy price declines, have been materially lightened by the marketing of bond issues of corporations and industrial concerns who by this means have been enabled to reduce their bank loans and strengthen their financial position.

Money rates have declined to the lowest point in years. The call loan rate has fallen as low as 2¾ per cent and the collateral time rate to 4 per cent. The recent issue of one-year certificates by the United States Treasury was floated at 3¾ per cent. Last month the rediscount rates of the federal reserve banks of New York and Boston were reduced from 4½ to 4 per cent, the lowest rate since 1917. Previously the Bank of England had reduced its rate to 3½ per cent. Ease in money rates was reflected in new high prices for Liberty and other high-grade bonds, all issues of the former having touched par. Indeed, the public absorption of bonds has developed an almost unparalleled expansion of the investment market. Estimates indicate that in the first half of the year the American people absorbed 2 billion, 400 million dollars of domestic and foreign securities, about three-fourths of which was in bonds. A most significant feature of this situation appears in the recent heavy absorption of foreign securities. During the first six months of 1922 we bought over 673 million dollars worth of foreign loans, mostly government bonds, as against a total of 695 million dollars for the entire year of 1921. This new investment phenomena is not only indicative of the confidence of our people in the final working out of the perplexing problems that have vexed international relations since the war, but it also provides a new and direct means for Europe, especially, to liquidate her trade indebtedness to America and so to maintain our export trade.

The figures for our total foreign trade have shrunk compared with war and post-war years, but they remain well above pre-war levels not only in value but in volume as well. The volume of our agricultural exports notably, except in the case of cotton and cottonseed oil, is very much greater than the average before the war. At this writing statistics for the full fiscal year ending June 30 are not available, but for the eleven months ended with May exports totaled 3 billion, 437 million dollars as compared with 6 billion, 180 million for the corresponding period of last year, and 2 billion, 400 million for the best year before the war. Imports for the eleven months amounted to 2 billion, 350 million dollars compared with 3 billion, 460 million a year ago and 1 billion, 800 million in the year 1913. In view of the continued widespread depression abroad and of the greatly reduced and fluctuating exchange value of the currencies of most foreign countries measured against dollars our foreign trade totals are very gratifying.

Further shrinkages, however, may be anticipated in both the export and the import trade. Failure of the Genoa Conference, with but little prospect at present of better success at the Hague, and of efforts to arrange an external loan for Germany, resulting in continued uncertainty as to the final adjustment of German reparations and inter-nation debts and continued depression throughout Europe, our best foreign customer, cannot fail to check our export business. It is equally evident that the passage of the iniquitous tariff measure now before Congress, framed without regard to sound economic principles, or without perception of the complete change effected by the war in our commercial and financial relations with the rest of the world, will impose the heaviest kind of handicap upon our import trade and the cruelest burdens of indirect taxation upon all our people already staggering under the load of unavoidable direct taxation. The export business is an essential factor in our continued domestic prosperity. But if we are to export we must also import. In the long run imports must pay for exports largely. Yet Congress drifting about without leadership or vision is shaping tariff legislation designed to exclude foreign products, practically the only means of payment available to our foreign customers who already owe us on government and private account 15 to 20 billion dollars. The passage of the pending tariff bill would make payment of these debts exceedingly difficult.

The foregoing summary of the outstanding features of the business situation holds much more of light than of shadow. Yet there are shadows both at home and abroad. Strikes in such fundamental industries as coal, textiles, and transportation have not only resulted in severe and irrecoverable economic loss—nothing but loss ever does or can result from warfare—but have left their trail of dissatisfaction, distrust, and ill-will at a time when industry pre-eminently needs co-operation and mutual forbearance. The sinister shadow of the soldiers' bonus still lies across the fiscal roadway. With a national debt over 20 times that of pre-war days, with an anticipated government deficit for the fiscal year 1923 of $484,000,000, and with business already heavily overburdened with taxation, the deliberate creation of additional tax burdens which will bring advantage to no one, not even to the ex-service man himself, would seem to touch the peak of economic folly.

It is traditional that periods of deflation, involving, as they necessarily do, declines in wages, profits, and prices, are accompanied by industrial unrest, social discontent, and resort to radical legislation. Our social and economic sanity is now in danger as we emerge from the depression from class legislation and radicalism. Protection from this danger lies in an educated and informed public opinion upon matters affecting our economic welfare. Difficulties in the international situation which though slowly improving, may yet become acute, and tendencies toward unsound economic policies at home, make it imperative that now as never before business men thoroughly grounded in the fundamentals of industrial and political economy shall lead in the shaping of policies and programs that promise the perpetuation of soundness in our domestic business structure and the restoration of economic order in Europe.

THE ECONOMIC FUTURE OF THE UNITED STATES

BY HOMER HOYT*

AN almost unbroken rise in the prices of industrial stocks for nearly nine consecutive months has just about convinced the most doubting of American Thomases that the business cycle is running true to form. From the valley of depression American business is again mounting upwards along the buoyant high road towards prosperity just as it did in 1879, 1885, 1891, 1896, 1903, 1908, and 1915. Serenely aloof from mundane influences, and mysteriously operated from the sun or the planet Venus, the business cycle maintains its 5–7 year time schedule with almost astronomical regularity. All of the artillery of the World War made scarcely a dent in the cycle's intangible curve; all of Lloyd George's crafty diplomacy tied scarcely a knot in its plotted graphs, and all of Lenine's attempts to dynamite the entire fabric of machine civilization hardly swayed for a moment its rhythmical rise and fall. Business men are still stunned from the shock which they received when the business cycle hurled them from a peak of business activity 15 per cent above normal in 1919 to the slough of depression 25 per cent below normal in 1921, but those who survived the heart-breaking descent are now in position to receive a gratuitous and exhilarating ride to the peak of 1923. Apparently history is about to repeat itself with automatic precision.

But the business cycle does not tell the whole story or even the most significant part of the story of America's economic future. Operating beneath the surface of these periodical fluctuations in business activity is a deeper and more fundamental set of forces—geological, psychological, mechanical, and financial—which are silently and persistently working to determine the place that America shall occupy as an economic and military power and as a factor in the progress of world civilization 10, 50, and 100 years hence. Since the beginning of America's industrial history, we have experienced the ever-recurring rise and fall of business activity, but each valley of depression has been at a higher altitude than the preceding valley and each peak of prosperity has been higher than the preceding peak. If every peak was leveled and every valley filled in, the average upward slope of our physical volume of production from 1865 to 1920 would have been 4 per cent per annum. The vital question that now confronts the American people is whether this long upward trend of the physical volume of production will continue at the same remarkable rate through the coming years so that the peaks of 1923, 1930, 1937, etc., will successively overtop each or whether after a century-long climb we have at last reached a plateau or dead level above and below which our business activity will oscillate with monotonous regularity. To answer this question, we must pass over in quick retrospect the forces that have been responsible for the material growth of America—a growth that is without parallel in all history.

Never before in the life period of the human race was there such a lucky combination of circumstances for the production of a vast material civiliza-

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tion as occurred in these United States within the last century and a half. The people, the natural resources, the machinery, the institutions, all synchronized in time and place to evolve an industrial society, whose sheer physical magnitude exceeds in actual reality the imaginative conceptions and sky palaces of the poets and romancers of the ancient world. A vigorous and energetic race of people from northwestern Europe, fired with the desire for economic power, stumbled upon a new continent containing one-half of the world's coal, one-third of the world's copper, one-sixth of the world's petroleum, a Mississippi Valley of remarkable fertility and great timber tracts; and stumbled upon it just before the beginning of a great wave of mechanical inventions that was to furnish the open sesame to unlock this—the greatest of all of Nature's storehouses. At first the settlers on this virgin continent were content to appropriate the rich natural treasures which could be carted away with the least difficulty and our raw materials went across the seas to feed England's earlier planted industrialism. Even the unskilful and wasteful economy that marked the halting progress of the first 60 or 70 pioneer years of our national life resulted in great material progress. Our population was doubling every 25 years as it blazed a path through the wilderness and planted the beginnings of our factory and industrial system. Following the Civil War, however, the American machine system burst forth in full flower.

Our growth from 1865 to 1920 has been simply prodigious. Our population increased from 35 to 105 millions. The production of coal, barometer of industrialism, jumped from 21 to 600 million long tons each year, and the output of its twin sister pig iron rose from less than one to nearly 40 million long tons. Since 1879 the aggregate production of all minerals increased elevenfold, while our manufacturing capacity has doubled since 1899. In 1860 there were only 15 cities with a population of over 50,000; today there are 150 such cities topped by Chicago which rose from an Indian trading post to a city of nearly 3,000,000 during a brief epoch in the life of the ancient cities of Europe, and by Brobdingnagian New York whose vastness staggers even the citizens of other modern metropolises. Radiating from these great centers there was also constructed a railway net of 265,000 miles and a telephone and telegraph web of 30,000,000 miles of single wire which brought into close communion the far-flung mountains and plains of America.

As a result of all this material progress the American laborer came to enjoy luxuries denied the kings and emperors of old. With an average annual meat consumption of 180 pounds, compared with 2.5 pounds for the Japanese, America sets the banquet table of the world. With 7,500,000 automobiles or 85 per cent of the world's total, the average American citizen can ride in his car to his work, while the possession of the most dilapidated "flivver" is considered the badge of a plutocrat in Poland. In his home, in every article of his dress and diet, and in his amusements, the American enjoys a standard of living unsurpassed by the average citizen anywhere in the past or present.

Such are a few indications of our progress. Can we maintain the pace, and project into the next century the same steep upward curve that will carry with it a hundred new big cities and gigantic factories of a magnitude yet undreamed of, or have we reached the apex of our powers? The very fact that we ask the question suggests a waning of our first exuberant and helter-skelter optimism which never

stopped to count our seemingly unlimited natural resources or to pause for breath in our reckless race for expansion.

Unquestionably some of the forces that lifted us up so fast during the past century are beginning to slacken. We will probably not discover as many new natural resources in the rest of the twentieth century as we did in the nineteenth and early twentieth centuries. Beyond our western horizon lies no second Mississippi Valley. No new coal, iron, copper and petroleum reserves comparable in magnitude to those we are now exploiting are likely to be added in the near future to our present known supply. We are cutting down our timber three times as fast as it is growing and within 10 years the eastern cities will be forced to pay freight on lumber hauled from the Pacific coast, where Douglas fir constitutes our last great timber stand. Thus our natural resources, while still the greatest in magnitude and the best balanced in the world, have all been taken up and are now counted in terms of a definite number of years supply.

Nor is this all. New inventions, while continuing steadily from year to year and while promising to lead us into new triumphs yet unsuspected, will hardly make the same relative rate of increase that accompanied the first marvelous unfolding of the industrial revolution. Finally, the increase in our human resources is also tapering off. In the early nineteenth century, the natural increase of our own population was from 3 to 4 per cent per annum; today the increase of births over deaths is barely sufficient to lift the numbers of our people 1 per cent a year. For nearly a century, our declining birth rate has been offset by an increasing stream of immigrants from Europe until the foreign born and the descendants of foreign born constitute one-third of our population, but as the source of this stream changed from northwestern to southeastern Europe and the quality of the newcomers became poorer and poorer, we have finally shut off most of this tide of humanity by the Dillingham bill, allowing now a maximum of 355,000 immigrants a year compared with a maximum of 1,218,000 in 1914 when immigration was almost unrestricted. Thus the rate of increase in our population is declining until the time may not be far distant when we, like France, will be faced with the situation of a static population. Possibly the standards of living of even this static population may decline, so that our waning consumption may be cut to fit our waning natural resources and productive power.

But the economic future of America need not be as black as the foregoing would seem to paint it. If the open frontier be closed, if the ultimate limitations of our natural resources hem us in, if the door to some undiscovered western Elysian fields be closed by the knowledge that there is nothing unappropriated beyond the Pacific, and if, in short there is no avenue of escape to a workless paradise except through the as yet impracticable plan of utilizing directly the sun's rays, or of harnessing the tides, or of extracting the energy out of the atom, then we will at last be driven to the necessity of applying ourselves to the materials we have and of constructing out of them by a conscious national program the most efficient possible national productive engine. For although the task of constructing the greatest industrial nation the world has ever seen thrilled the imagination of the American people and aroused from millions of self-motivating human centers a bold and self-reliant individualism that was tremendously active in translating a driving purpose into the concrete

reality of railroads, factories, and shops, there could not possibly be developed by such unco-ordinated and unrelated effort the most efficient technical machine system. The 288,000 separate manufacturing plants in the United States today are indeed hooked together so that they operate roughly as a single industrial unit; the very nature of modern exchange makes such co-operation necessary and the price-and-profit system makes it overwhelmingly desirable for each individual thus to fit himself into the national team-play, but the co-ordination of these manufacturing plants with each other and with agriculture and retail and wholesale distribution is far from perfect. Out of the materials we have in the United States that were brought out of the ground by a remarkable spontaneous outburst of individual energy, we can construct, by consciously directing the efforts of 40,000,000 workers towards a single goal, a super industrial machine that will turn out a greater volume of goods at a lower unit cost for human and mechanical power than any industrial machine yet known to man.

The task before us is twofold. First we must extract the maximum power out of our geological, psychological, mechanical, and financial resources; and second we must maintain a proper balance between manufacturing, agriculture, wholesale and retail distribution, between city and country, between capital and labor, and between production and consumption so that our machine will draw power from every part and not become top-heavy or run off the track. Although every part of our program is a vital and integral part of our organic conception as a whole and hence cannot be separately discussed as an isolated and independent factor, it will be necessary for the sake of exposition to indicate one by one the points at which progress can be made.

The first problem is to use the energy of vast resources that are now hourly running to waste. The first of these wasting assets are agricultural and mineral. Our best lands are indeed cultivated, but it is estimated that their crops could be increased 25 per cent by the use of the most improved agricultural methods. The yields of the poorer lands can also be greatly raised by the application of nitrates obtained cheaply from the air. But this is still attacking only the fringe of the problem. For of all of our national domain, only 15.6 per cent is under cultivation. It is idle to suppose that we can increase our cultivated percentage to an equality with Denmark's 66 per cent, for we have too much arid and rocky land, but it is as idle on the other hand to argue that the food production of the United States cannot be greatly increased in the future, not only by the use of better methods of agriculture on the best lands, and the improvement of the poorer lands by fertilizers, but also by the extension of the cultivated area to more of the western arid plain by irrigation, to more of the swamp lands by drainage, and to millions of acres of mountain lands by the planting of grass, forests, or orchard crops.

Of all of our mineral resources, the most important and the most wastefully used is coal. Coal, from which we derive at present only 4 per cent of its mechanical energy, whereas the best mining practice would give us 48 per cent of its mechanical energy and a host of by-product dyestuffs, explosives, medicines, and other coal-tar products that are indispensable in war and peace. Coal, of which we burn a quantity during the winter months sufficient to fill the Panama Canal and which we shovel from the mines into cars by the

hand-power of 600,000 men instead of by machines. Coal, mined intermittently and wastefully by thousands of independent owners—our most precious vital resource handled in the most wasteful human, mechanical, and geological way. The space allotted to this article prohibits a discussion of the even greater wastes involved in the extraction of other mineral resources such as petroleum and natural gas, which have been sacrificed so ruthlessly under the wild scramble of competitive drilling.

Our second great resource from which we can draw a vast store of energy is psychological. Today our labor power lacks the great creative drive that impelled it in the first expansive burst following the Civil War. The game of business is losing the zest it had for the first Vanderbilt. The tasks of labor are becoming more specialized and less personal, and the goal of endeavor less obvious. Lost in the mazes of an impersonal system, whose machinations he does not understand, the American laborer is putting forth a grudging and unwilling effort. The driving purpose of the war let loose a flood of latent productive power, whose existence we did not suspect until the records of physical production showed us that with 5,000,000 men in the army and navy, we were still producing 20 per cent above pre-war. If we can formulate a conscious national purpose in time of peace that will arouse the enthusiasm and enlist the loyal support of all American labor and capital, we will tap a force which, as Royal Meeker says, will be comparable in magnitude to the unused power of the tides.

Our third source of power is mechanical. To utilize it, we must substitute more and more machinery for hand labor. To do a thing so obviously advantageous would seem to require no urging, but as a matter of fact our individualism which protests against standardized goods is compelling us to use painful hand labor instead of the mighty steam and electricity. For a machine is only fit for the automatic and routine stamping out of a great mass of identically the same articles. This it can do at a minimum of cost and human effort. But if we insist upon minor and unnecessary differences of style and form in every article we buy, the iron laborer goes on strike. No one would advocate that all goods be cast in the same monotonous mould, but while maintaining a necessary variety to meet natural differences of consumers and while furnishing a pleasing variety in external finish, it is still possible to vastly reduce the number of styles and brands of the goods in common use to the end that more machines may be used. Programs of standardization are today making rapid headway in the United States and they are the most potent factor in reducing the cost of manufactured goods.

The fourth source of power is financial. Already we have greatly increased the mobility of capital and eliminated banking or money panics by the federal reserve system, but there are still great possibilities of improving our control over credit so that the excesses of the boom may be prevented, so that the various elements of the price system may be kept in alignment with each other, and that thereby the price-and-profit mechanism which brings about the distribution of productive effort throughout the various parts of the economic machine may not become deranged.

Thus having briefly indicated how the American people, unable to appropriate new resources, can nevertheless extract vastly greater power out of the resources they already have under a scientific national program, let us now

consider the second major problem, that of maintaining the proper balance between all of the factors of our economic life.

The lack of balance between agriculture and manufacturing in the United States today is greatly lowering the efficiency of our national productive engine. The prices of agricultural products, while now somewhat higher than the low points of the depression are still not far above pre-war levels, while the prices of manufactured products, burdened by heavy labor and overhead costs, have dropped but little from their peaks and are now nearly double the pre-war plane. As a result of the farmer's waning purchasing power due to the relatively low prices of agricultural products, the output of manufactured articles decreases, which raises their overhead costs per unit of product and their prices still more, and puts them still further out of the reach not only of the farmer but of the foreign buyer as well. The farmer is unable to raise his prices to the level of manufactured goods because he must sell in a world market in competition with the farmers of Argentina, Russia, and Australia, and in the present impoverished state of the world this is equivalent to competition with pauperized labor. As a result of this maladjustment a vicious cycle tends to set in which lowers the standard of living of the farmer on the one hand, and lowers the output and productive efficiency of the manufacturer on the other hand.

But the way to reverse this vicious cycle and to start it operating in the opposite direction towards ever-increasing national power is to squeeze the maximum efficiency out of our resources in the manner already suggested. Then, automatically, will the balance be restored. For by increasing the output from his lands by improved methods, and by getting a larger share of the world price for agricultural products by co-operative marketing, the farmer will earn a larger net income and exert larger purchasing power without raising the present level of farm prices. On the other hand, the manufacturer by the practice of standardization will be able to sell staple goods at lower prices per unit without paying lower wages, and at this lower price he will be able to sell in increasing quantities not only to the American farmer but to the foreign consumer. Thus by raising the efficiency of agriculture a notch and then by using that as a level to raise the efficiency of manufacturing, the productive engine of the United States can be gradually geared up to run at higher speed and at less power cost.

To install improved methods of agriculture and standardized manufacturing requires far more than the mere elaboration of a plan. The slow-changing customs, habits, prejudices, institutions, and the very life of our people have become woven into the industrial system we have today, and only the force of economic necessity can tear up these deep-rooted human bonds and stir us out of an inertia like that which held England for centuries in the wasteful manorial system of agriculture. But pressure from within of population upon wasting natural resources, and pressure from without of manufacturing nations seeking to outstrip us in productive efficiency and thereby in ability to undersell us in the markets of the world, may well force us to break up our chaotic medley of manufacturing plants and backward agriculture units and to build a great national productive engine that will draw out of all of our resources their maximum efficiency.

If consciously or unconsciously, the United States is forced to weld its scattered energies into a productive

unit with a single aim and purpose, we can confidently predict that the curve of physical production will continue upward during the rest of this century. The rate of increase will perhaps decline somewhat, but as the rate of increase of our population will probably decline still more, the standard of living of our population will tend constantly to improve. As our agricultural efficiency increases, we will continue to be a self-sustaining nation, independent of foreign food imports. As our manufacturing efficiency expands through the increasing use of more, larger, and faster machines, we will be able to undersell the world. The tremendous exportable surplus of manufactured goods will not be offset by imports, for as we will produce our own food, we will have no need of imports except for such articles as manganese, tin, coffee, rubber, silk, bananas, cocoa, spices and other tropical foods or rare mineral products. This favorable balance can be paid only in one way, by the acquisition of investments in foreign countries that will give us control over the few raw materials that we lack and fortify us against possible military attack. It goes without saying that our potential military power will grow with our factory capacity and the efficiency of our agriculture, for it needs no demonstration now, only four years after the armistice, that armies and navies are but the cutting edges of the factories and mines of a nation and that it is an unending output of munitions that blasts the way to military victory.

Such is the road of the future which will lead us to ever higher productive peaks. It is not the road that will necessarily lead to the highest cultural peaks. It is the road that will bring us into closer grips with our resources and into closer competition with England, Germany, and France. Had we the choice, we might prefer to avoid this road and decide to call a halt to our material expansion. But will we have the choice? If the daily standards of living of our people and the welfare and comfort of our dearest friends and relatives depend upon the national organization of our resources, if the continued strength and power of this nation depend upon its ability to keep pace with the manufacturing competition of other nations, to stay out of the race means that we will surrender our leadership and our national aspirations. To maintain the United States as a nation and to preserve our country for all that it may contribute to the art and science of the world, it is necessary to lay a firm and sure economic foundation for the future and this may be done by extracting the maximum efficiency out of our geological, psychological, mechanical, and financial resources and welding them together into a great national productive engine.

MEASURING THE MOMENTUM OF OFFICE WORK

BY WALLACE CLARK *

THE office manager realizes that he must have a clear understanding of his task and a better control over his work when business conditions are below normal than at any other time. Economies become imperative in such periods, and, fortunately, the manager has more time to think about his job. If this manager is a keen analyst, he soon comes to the conclusion that it is the function of an office to serve rather than control.

The usual business organization has at least two distinct parts, manufacturing and distributing. In some cases, it may be primarily a manufacturing concern with its selling taken care of by some other organization, or on the other hand, its principal interest may be selling and it may purchase from another company which manufactures. In either case, there will be two distinct tasks: first, getting the goods; and second, disposing of them.

There is usually a small group of executives who control the operation of a business. Under their direct or indirect charge there is also an office which comes between the manufacturing and the distributing. This small group of executives in control of the business may be regarded as separate from the office rather than a part of it, so when an office is referred to in this article, it means that organization of workers as distinct from the executives, the manufacturing plant, and the distributing end.

For an office to be successful, the members of its organization must realize that they are there to serve manufacturing and selling and not to control it. For instance, the office manager, the head of the order department, or the controller of the company should not attempt to tell the manufacturing plant what it can make and what it can not make, or to tell the sales force what it can sell. It is the duty of these men in the office to keep records and present them in such a way as to help the plant to manufacture things which can be sold, and to help the distributing organization to sell the things which can be manufactured at a reasonable cost.

The manager who understands the relation of his office to the other parts of the business, takes pains to instil into the minds of all those responsible to him the fact that *an office is organized for service.*

The manager also understands that an office is engaged not in originating things, but in transmitting them. For instance, an order originates in the sales department and passes through the office on its way to the manufacturing plant; the order is translated by the office into terms which will be understood by the organization which does the manufacturing. On the other hand, a new product comes from the manufacturing department and information in regard to it is translated by the office into terms which will be understood by salesmen and customers. The office also keeps records of what has been done and files information of various kinds which is applied to the two constantly moving streams, one from the selling to the manufacturing and the other from the manufacturing to the selling.

To measure the effectiveness of the

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management of an office is to measure the rate at which work goes through that office. We are dealing here with a moving force. What is the momentum of that force? Think of your own office. Is the momentum of these two streams retarded or accelerated by your organization? Do orders come in and go straight through, or do they come in and wander around the office and take a little rest before they go out the other door? Is it the same way with information which is to be transmitted from the plant to the customer?

The wise manager knows that *the effectiveness of an office is judged by the rate of flow of work through that office.*

Getting office work done is limited by three things—time, cost, and quality.

That is:

1. It must be done at the right time.
2. It must be done at a reasonable cost.
3. It must be done in accordance with a definite standard of quality.

I say a definite standard of quality rather than a high standard of quality because a high standard is not always necessary. Take, for instance, the appearance of letters. An investment broker, a Fifth Avenue jeweler, or a manufacturer of typewriters must send out of the office letters which give the impression that everything in that office is done with extreme accuracy by well-educated people. On the other hand, letters which go out of a mail-order house should not be too well typed. Customers are buying from that house because they believe that they can get more for their money there than anywhere else, and they do not want to pay for "hifalutin" letters. The standard of quality of the work done in any office is determined by the executives of the company and this standard should be definite and clearly explained to all employees.

The relative importance of these three limits to getting work done—time, cost, and quality—constantly varies. It may be impossible to get certain work done when it is wanted without sacrificing quality or increasing its cost. No general rule can be laid down to determine the relative importance of these three limits.

Granted that these three things are taken into consideration in measuring the rate at which work moves through an office, let us suppose in a given case that this rate is not satisfactory. What is to be done about it? The obvious step is to find out what interferes with the flow of work.

Let us take an order department as an example. There may be on the average 100 orders received per day. It is the duty of this department to add certain information and pass those orders through to the plant. The department is provided with the requisite number of employees and with the necessary equipment to handle this quantity of orders. Let us get the head of that department to report at the end of each day the number of orders he has put through and the number he has left over at the end of the day, with the reasons why these orders were not put through. In the figure of 100 per day we have the rate of flow of work which is considered satisfactory. In the number which were put through, say 80, we have the actual rate at which the work moved. In the reasons for not putting through the other 20, we have the obstacles which stood in the way of this department, that is, the conditions which retarded the flow of work.

Take another, say a purchasing department, which buys supplies or equipment for a large office. Its work comes from the office in the form of requisitions, but there is no regular flow of work, so that it is impossible to

say that the day's work consists in handling 50 requisitions. However, it is possible for the department to handle each day all the requisitions which are received, say, up to three o'clock. Before leaving each night the workers in that department can get into the mail, purchase orders or requests for quotations covering whatever requisitions they receive before three. At the end of the day the head of that department can have made out a report showing the number of requisitions received, which is the desired momentum, the number of orders placed and the number left over at the end of the day with the reasons why.

Take as a third example, a stenographic department. The task of the head stenographer is to have transcribed all work dictated through the day and to turn out all the copy work which is wanted that day. At the end of the day her report shows the number of lines dictated, the number transcribed, and the number left over, with the reasons why. These reasons might be absence of stenographers, typewriters in need of repairs, the fact that someone dictated a large amount of mail after three o'clock, that several stenographers were idle until half-past ten in the morning waiting for dictation, and so forth. The head stenographer thus reports to her superior the rate at which work went through her department compared with the desired rate, and enumerates the obstacles which stood in her way. The knowledge of these facts makes it possible to prevent the recurrence of such delays.

In the average office the delays which are brought up in this way are of great variety. Some of them can be removed only by the executives of the company, others are under the control of the office manager, the department head, or the worker himself, but a knowledge of these delays should help each one to overcome the obstacles over which he has control. Delays are frequently due to undefined responsibilities—cases where authority and responsibility do not match. Another fertile cause of trouble is complicated methods; things which have been done the long way on account of unusual conditions or peculiarities of employees. When those conditions changed, or employees were transferred, methods had not been straightened out. Such delays point out the need of simplified methods.

When we have found out what interferes with the flow of work through an office, an employee can be trained to simplify his own methods and to overcome his own obstacles. This gives him a greater interest in his work and develops his initiative.

When delays are avoided, obstacles removed, and work flowing smoothly and rapidly through an office, you will find workers well trained and the office as a whole organized for service.

THE FUNCTIONS OF SALES MANAGEMENT

BY JESS H. WILSON*

WHEN you approach the problem of Functions of Sales Management, it seems to become the question of "What a Sales Manager Ought to Know," for the efficiency of a department that deals so largely with the human equation seems to depend on the knowledge and leadership of the man at its head.

In analyzing a sales department's function, we are brought face to face with the fact that in the beginning, before a business has gathered momentum, sales activities are oftentimes of necessity directed by expediency of the moment, and that as success is attained, the work is departmentalized as the need presents itself; and so, like Topsy, most sales departments "just grow'd." It would seem to be an axiom, then, that the efficient, co-related sales department is "reorganized, and not organized."

Since this function of the reorganization of sales department probably had its inception in the successful functional organization of the manufacturing plant and the office, wherein the machine and tools of manufacturing were so arranged that they set the pace and forced a certain definite predetermined reaction from the worker, who, because being human, was a "variable," it is well to bear in mind that in sales work one deals largely with "human variables," for Human Incentive and not the automatic machine sets the pace, and therefore, in your plan of operation, ideas take the place of machinery and at every point of contact are dependent for success upon the reaction of human nature; and so this brings into the realm of sales management the necessity of the vital, human viewpoint of the psychologist, since human nature cannot, at present at least, be measured by the slide rule.

In this connection, one management engineer has been quoted as saying it was possible to work out a four-point slide rule that could be used in estimating quotas; but what are quotas, except your expectancy of attaining a certain share of a definite market, and what are markets, but the buying habits of individuals in the mass?

Therefore, it seems logical that first sales work or merchandising resolves itself into two major subdivisions:

1. Planning the work
2. Operating the plan

In planning sales work you have three elements:

1. The article, service, or idea to be sold
2. The consuming market
3. The methods of reaching the market

While in operating the plan we have only two elements:

1. Administration
2. Operation

Right here, let us emphasize that the best plan on earth is merely the stringing together of words unless there is someone who can breathe into it the breath of life. A sales plan is of necessity expressed through men, and the sales manager who can translate a scientifically prepared plan into results is the "key man" of merchandising, the motive power of industry; and, as the general who has his plan of

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operation prepared by a general staff of experts, so the sales planning department lays out the functions of the sales department in such a manner as will leave the sales manager unhampered in his strategic operation of men and ideas, that he may exactly meet and profit by changing conditions among his consumers, distributors, and competitors.

The analysis of "What Is Sold and Its Market" is more logical than an analysis of the plant capacity and the fitting thereof of plans to sell the output. The fact that a concern operates in a limited territory should not be accepted as final, for if it has international possibilities, they should be visualized and a definite plan of action laid out with a view of attaining the maximum of these possibilities over a given number of years. Likewise a concern that is operating internationally, but not running to capacity, does not need stimulation so much as it does an analysis of how it may render the best service to the greatest number of people at the lowest cost. Whatever is sold, whether merchandise, a service, or an idea, presupposes a market, and the product and the market are inseparable from any planning viewpoint; consequently, the product itself must be interpreted in its relation to human welfare of desires; *it must be personalized!* Planning the work, it seems to me, would presuppose a research that would embrace a study of the following subjects:

1. Present products
   (a) Technical analysis
   (b) Cost analysis
   (c) Practical tests
   (d) Competition
2. Origin of present business policies
3. Markets where present products are sold
   (a) Demand
   (b) Consumption
   (c) Distribution

4. Present distributive methods and reactions of
   (a) Consumer
   (b) Retailers
   (c) Distributors
   (d) Employees
5. Territorial factors
6. Seasonal factors
7. Present service performed (or use)
   (a) By-products
8. Possible service (or use)
   (a) By-products
9. Possible increase of market by change of product or price
10. Study of price ranges and "what traffic will bear" with a view of bringing into your market range marginal consumers (this subject is, of course, related to cost to make and sell, as the element of profit, either strategic or bankable is necessary to complete any sale)
11. Standardization and elimination
12. A comparative study of the product and its competitors and a study of the market such competitors enjoy and the reason thereof
13. Containers and packing, or the appeal your product makes to the senses of your individual prospective purchaser
14. Outline of possible market and possible products

Such an investigation should enable you to determine your market and fit your products to it, unhampered by consideration of finances or plant capacity. When completed, then comes the important question of how to tell your market—the people who will be ultimately served—about it, and having your product where these people are in the habit of purchasing similar products or services.

That you may use the results of such an investigation in tangible form, the following action should be taken:

1. Valuation of your market by territories, that you may:
   (a) Accurately measure sales possibilities
   (b) Study your plant capacity compared to these possibilities

(c) Study utilization of money you have available with which to realize these possibilities

(d) Study point where law of diminishing returns will operate

2. Lay out master plan or functional chart of sales operation. Such a plan should co-ordinate your product, your market, your plant, and your capital into a living merchandising policy that takes into consideration the rights of the public, of common decency and yourselves (for the laborer "is worthy of his hire"), and should enable one efficiently to proceed to translating a reasonable per cent of possibilities into capacity business for your plant.

This plan should be the blue-print of the functional sales operation, from which the organization may be charted. It is assumed that this work would be done by the sales planning department or by a consulting sales expert, and, of course, it is assumed that the sales planning function will be continued under the administrative function, that your plan may continually anticipate and meet changing market conditions (and market conditions are human buying habits in the mass).

Such a self-perpetuating master plan would probably embrace functions subsequently listed in this article, although each function or group of functions assigned to one executive would depend for success on the interpretation and vigor of action of that executive.

In the co-ordinating of such a master plan, it would seem to be logical to organize a sales council for offense and defense, which council would be made up of responsible executives, or department heads, which would be presided over by the chief sales executive, and, with a secretary to properly handle the detail, to take up and refer to the proper men all unusual situations.

Administration

(A) Budgeting of Appropriation to Merchandising Functions

1. Determination of administrative functions
2. Placing responsibility for functional operation and charting lines of control
3. Selection of proper executives

(B) Formation of Policies, Regarding

1. Consumer
2. Retailer
3. Distributor
4. Credits
5. Competition
6. Legislation
7. Trade organizations

(C) Prices, Discounts and Maintenance

1. Selling cost
2. Distributors' profit
3. Retailers' profits
4. Retail sale price
5. Competitive prices
6. Legal status

(D) Sales Quotas Based on Territorial Valuation

(E) Salesmen's Territories

1. Market centers
2. Jobbing centers
3. Freight rate districts
4. Warehouse and branch locations

(F) Office Routine and Management

1. Office layout
2. Routing of work
   (a) Orders
   (b) Correspondence
   (c) Reports and statistics
   (d) Warehouse inventories
   (c) Statistical records
   (f) Mailing lists
   (g) Traffic
3. Functional staff necessary for task accomplishment

(G) Statistics of Attainment

1. Daily comparative sales and percentage cost
2. Daily production record and stocks on hand
3. Daily record of advertising returns
4. Monthly budget expenditures
5. Monthly sales by items by territories compared to quotas

6. Monthly salesmen's cost to sell
7. Monthly record of advertising returns
8. Monthly record of mail promotion returns
9. Monthly record of change in merchandise turnover per cent
10. Monthly record of complaints from
    (a) Employees
    (b) Consumers
    (c) Retailers
    (d) Distributors
11. Monthly record of per cent of active to inactive accounts

(H) Market Extension and Research
1. Sales strategy in presentation of product and policies
2. Measuring efficiency of present effort
3. Study of alternative marketing plans, both practiced and possible
4. Analysis of statistics of attainment
5. Probable trend of market and its requirements
6. Patents, trade-marks, and copyrights
7. Check on competitor's activity
    (a) Advertising
    (b) Selling
    (c) Mail work
8. Territorial valuation
9. Functional staff necessary for task accomplishment

(I) Scheduling Plan of Action
1. Chronological layout of factory production and delivery
2. Chronological layout of sales organization work
3. Chronological layout of mail campaigns
4. Chronological layout of advertising
5. Chronological layout of special stunts
6. Chronological layout of general development

Operating

(A) Results Expected from Face-to-Face Selling and Desired Reaction from
1. Consumer
2. Retailer
3. Distributor
4. Employees

(B) Functional Staff Necessary for Task Accomplishment

(C) Personnel of Sales Force and Selection of Salesmen
1. Training of sales force
    (a) Layout of sales points and argument
    (b) Probable resistance to sales plan from
        1. Consumer
        2. Retailers
        3. Distributors
        4. Employees
    (c) Objections and answers
    (d) Portfolios and samples
    (e) Routine and reports
    (f) Sales manuals
2. Development of men
    (a) Conventions
    (b) Schools
    (c) Bulletins
3. Direction of men
    (a) Calls
    (b) Routing
    (c) Discipline
    (d) Stimulation
    (e) Rewards
4. Compensation
    (a) Salary
    (b) Commission
    (c) Points
    (d) Bonus
5. Store demonstrators or resale force
6. Distributors' salesmen
   Retail store clerks

(D) Results Expected from Advertising and Desired Reaction from
1. Consumer
2. Retailer
3. Distributor
4. Employee

(E) Functional Staff Necessary for Task Accomplishment

(F) Selection of Advertising Agency

(G) Selection of Dominant Advertising Appeals

1. For consumer
2. For retailer
3. For distributors
4. "Staging" or presentation of advertising appeals
5. Selection of media to carry advertising appeals
    - (a) Newspapers
    - (b) Magazines
    - (c) Outdoor advertising
    - (d) Street cars
    - (e) Trade papers
    - (f) House-organs for employees
    - (g) Display material
    - (h) House-to-house demonstrators
    - (i) Conventions and fairs
    - (j) Novelties
    - (k) Dealer helps—from effect on consumer

(H) Results Expected from Mail Promotion Effort and Desired Reaction from

1. Consumers
2. Retailers
3. Distributors
4. Employees

(I) Functional Staff Necessary for Task Accomplishment

(J) Correspondence Supervision and Training of Correspondents

(K) Selection of Media to Carry Mail Promotion Effort

1. Letters
2. Broadsides
3. Booklets
4. Folders
5. Catalogues
6. House-organs—to trade
7. Mailing lists
8. Dealer helps—from effect on dealer

GOVERNMENTAL INFLUENCE IN FOREIGN TRADE

BY ALLAN B. COOK*

EUROPEAN competitors for world trade are receiving assistance from their governments in their efforts to regain the markets in which their wares were formerly sold. It is worth while, therefore, to consider the manner in which governmental influences may be felt in foreign trade, and for our merchants and manufacturers to know their own position in this respect.

First as to the troublous tariff question. The importer and exporter are naturally free trade enthusiasts, for one can bring foreign wares into the United States more cheaply if there are no duties imposed upon such goods, and similarly the other can sell more effectively if there are no tariffs abroad to hinder the entry of his products into other countries. Domestic traders and manufacturers in all lands, however, are equally strong in their desire to see a minimum of foreign competition in the home markets and so urge their governments to impose taxes upon articles of foreign origin which will give those produced locally a preferred position as regards salability in their own territory. It is easy, therefore, to see that any government is faced with a difficult problem as well as a dangerous one, for no policy which it may adopt can hope for universal support, and further, the economic phases of tariff legislation are so intricate that if not treated with due consideration unfavorable reaction is bound to result.

There are three features involved in the tariff question which require analysis:

1. The element of protection.
2. The production of revenue.
3. The international effect on our trade.

In the main, any young and desirable industry struggling for a firm footing should be given protection sufficient to insure its existence, and any duty necessary to prevent foreign manufactures from driving it to the wall should be imposed. When because of extraordinary expenditures a nation finds it necessary to recoup financially, the tariff offers a valuable source of revenue and should be enacted sensibly with that in mind. Our associates in the concert of nations appreciate the fundamental necessity of the two cases described, for they follow the same practice in their own affairs.

When, however, protection by tariff is granted in any country to agriculture and to highly developed industrial organizations, the ill effect is twofold, for its citizens are forced to pay more for their purchases than if importation was not obstructed; and, furthermore, the ordinary trade balance is likely to reflect this interference in an excessive export and a restricted import movement, with the result that gold flows accordingly until foreign governments step in and retaliate by barring the protectionist country's goods with prohibitive tariffs. This means that the foreign markets are then supplied either from local sources or outside channels other than those which formerly met such needs, and the export trade of the nation which originated a high tariff program dwindles and will eventually vanish if its duty schedules are not lowered in time to prevent this result,

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Sir Edmund Walker, President of the Canadian Bank of Commerce, in his address at the annual meeting of the shareholders of that institution on January 10, 1922, when referring to the tariff question stated:

> If the Fordney tariff remains in force our power to buy from the United States will be curtailed accordingly and we must in self-protection put every possible obstacle in the way of our people buying from that country the commodities for which we are thus rendered unable to pay.

This answers the plea of the politician and others for that policy which says, "Let us have export but no import trade."

When a nation enters into tariff negotiations with others abroad, it can secure results of great value if skilful in its trade diplomacy. Assume for a moment that American goods at some time in the future are practically eliminated from the Argentine market because of a tariff wall, but that we are large and consistent buyers of hides, skins, meats, and wheat produced there. A notification sent through the proper channels informing the government at Buenos Aires of our intention to revise our own tariff schedules and that we are not particularly pleased with our treatment at its hands, would be likely to cause a modification of our South American neighbor's import duties in such fashion as to assure admission of our wares on an equal footing with those from Europe or any other part of the world.

Again at another time we may find our markets are being flooded with goods from abroad which are placed here by unfair methods of competition such as "dumping." This is the practice of selling goods for export at a figure far below cost in order to control the world's trade in given articles, while charging exorbitant prices above cost at home in order to recoup the loss caused by the foreign shipments. A threat on the part of the government here to establish prohibitive duties on the merchandise in question coming from that country should cause intervention by its officials with the guilty persons to the end that they reform.

In cases such as pictured, if diplomacy fails to bring about the changes desired, then the United States government should enact restrictive legislation and allow the resultant economic pressure abroad which follows to run its course. In the case of Argentina the loss of American orders for hides and skins and other products should have a tendency seriously to affect the prosperity of that country; likewise the nation guilty of "dumping" is likely to feel the effect of our retaliatory measures so that in due course a popular demand will make itself heard requiring government negotiation looking toward an adjustment of the current tariff condition.

In any illustration such as the foregoing it is necessary to stress certain factors which in actual situations will vary. Bearing in mind this elasticity, the general fundamentals unfailingly hold true, and to greater or lesser degree the reactions will occur as described.

A trade treaty between two nations assures both by its terms that no unfavorable and retaliatory tariff schedules will be set up by the other, and usually stipulates further that certain goods of one are to be received by the other on a preferential basis in exchange for similar concessions for other classes of products. English goods enter Canada at lower duty than similar articles from the United States. We have a preferential standard in our favor when trading with Porto Rico and the Philippines.

The idea of reciprocity between Canada and our country is not new and may in the future be accomplished, thus removing all custom duties between the two countries. This would be an example of the trade treaty elevated to its highest point.

Our European contemporaries realize the value of the tariff as a trade weapon and use it effectively at every available opportunity, while our record in this respect has been the reverse, for we have consistently ignored our international trade possibilities and turned our gaze inward rather than outside of our own boundaries. It is to be hoped that this condition of affairs will change for the better with the passage of time, for it is a drag upon our progress.

II

Next as to the matter of consular service. The consular service which each nation of commercial importance maintains adheres quite closely to a fixed pattern, so that we are justified is using that of our own country for descriptive purposes. The Bureau of Foreign and Domestic Commerce has a staff of field representatives scattered about the world's markets. Their duty is to collect data on current conditions in the territories under their supervision and to make reports to our government at Washington regarding the state of domestic as well as foreign trade. A considerable quantity of statistical matter is compiled concerning the import and export movement passing under their eyes not only as regards the total and its subdivision by commodities and articles, but also the relative percentages going to and received from other countries in the case of each market. This information is published in periodical and pamphlet form thus assuring our merchants and manufacturers who are interested, of a fund of information which would be expensive and difficult for them to secure on their own behalf as individuals. For that reason the service rendered is of great value to our traders.

In addition certain trade opportunities are indicated and the attention of the public called to them, thus placing our importers and exporters in touch with merchants abroad who are seeking to sell their wares in the American market or who are desirous of purchasing our products. A considerable amount of satisfactory business results from this work of our consuls.

Any news concerning changes in tariffs and trade regulations abroad is transmitted by them, thus enabling our government to know at all times what other nations are doing in that respect, and in turn pass such data along to the American business man. There is a limited number of special trade commissioners whose duty it is to make certain specific reports as designated by the department, which holds this information at the disposal of our merchants.

The European nations particularly follow much the same plan as the United States, but have that advantage which is founded upon more generous financial appropriations for their consular services and a well-established governmental policy regarding commerce.

The question of transportation and subsidies is also to be considered. The railroads in many countries are either authorized or permitted by governments to charge lower freight rates on goods destined for foreign lands than similar domestic shipments must bear. The basic reason for this policy is the desire to assist exporters to either undersell, or meet on equal terms the foreign competitor offering

like wares abroad. The loss thus created for the inland carrier may be offset by correspondingly increased charges on ordinary freight movements or by direct refund from the government in accord with the national policy in such matters.

Similar tactics are often adopted with regard to the merchant marine, subsidies or revenue from governmental sources being paid by it for some service such as the handling of mail, or as an out-and-out bonus for the aid given by the transportation companies to the country's export trade.

Early in 1922, the President recommended to Congress that a merchant marine fund be created by utilizing 10 per cent of all customs receipts for that purpose and that certain other government taxes be added thereto. He further suggested that our coastwise trade laws be extended to include the Philippine Islands; that all trade with them be required to be by American ships; and that preferential inland rates be granted on through shipments handled by our own bottoms. The benefit to the merchant marine of this country is obvious, but the danger in any such program is the possibility of retaliation by foreign governments if in their opinion our methods or those of any other nation may be classified as unfair competition. As in the case of tariff legislation, calm and collected judgment of international effects is best if in the end a country's trade is not to suffer.

III

A consistent diplomatic policy has also an important bearing on foreign trade. It is an asset if it calls for the maintenance of relations by one country with other nations in such fashion as to secure equal freedom of movement for its products into those lands as that enjoyed by goods from other sources, and further protects the investment of its citizens abroad by preventing any unfair treatment on the part of the government of the nation in which such funds have been placed.

The British, French, and other European countries have insisted that their flags follow the money sent abroad by their investors to develop industry and resources in a foreign land, but the United States has not taken a consistent position in this respect. To the extent that we back and fill while other nations sail ahead on their fixed courses will we suffer, for confidence is the basis on which investments are made, and it is also the inspiration which creates constructive trade efforts at home or in the foreign field.

Governmental activities in opening new trade routes also have a direct effect on foreign trade. The Suez and Panama Canals have had an important effect upon trade, for they have brought the undeveloped portions of the world into closer contact with those who have a modern industrial and financial structure, to the mutual advantage of all concerned. The elimination of distances between England and the Indian and other Far Eastern markets promoted and increased the flow of trade back and forth, just as the Panama route has brought our Atlantic seaboard industries closer to China, Japan, and the balance of the Orient than ever before. While the world as a whole gains through such shortening of trade channels, both we and England have probably secured larger returns than other nations.

All of these governmental methods for rendering aid to trade while non-financial in nature have a distinct bearing upon the merchant's ability

to buy and sell in foreign markets for the reasons specified in each instance. As his financial requirements vary with the amount of business passing through his hands, it is advisable for him to understand the probable future effect of any current changes in these factors and to make his banking arrangements in accord with his forecast.

IV

The governmental guarantees in England must also be considered in their effect on foreign trade. England's merchants can secure actual cash advances upon their export drafts or have their bills of exchange guaranteed in part or in full by the government after its Exports Credit Department has satisfied itself regarding the financial standing of the drawees, proceeding in the same fashion as that followed by a banker to secure such information. It may require the importer to put up security or not, as it deems best.

The guarantee method has been used much more frequently than the actual cash advance, for when backed by the British government's promise to pay all or part should the foreign importer fail to do so, such paper is readily bankable and the drawer has no difficulty in securing cash therefor from his own bankers.

The guarantees given by the government are divided into two classes. The first comprises those known as "general," under which bills are limited to six months' tenor but may be renewed for not more than a like period. The "general" guarantee covers the full amount of the bill but permits the government to have recourse upon the drawer for 57½ per cent of any loss that may be sustained. The second class, the "specific" guarantee, is limited to 85 per cent of the draft if its tenor is in excess of one year, but if the usance is less the face amount may be covered. The government's right to claim upon the British exporter for losses resulting under "specific" guarantees is limited to 50 per cent of the same if only 85 per cent was so guaranteed, and 57½ per cent if the full amount was covered. In addition to the two plans mentioned the government stands ready to share bankers' losses arising from export transactions.

Our government also extends aid to exporters selling American products abroad, who find themselves unable to finance such transactions through ordinary channels. This is accomplished by the War Finance Corporation which was revived by Congress to make possible the export of our surplus raw stuffs and other articles and to secure certain other results not related to foreign trade.

In actual operation it has had little effect upon the trade situation, for the volume passing through its hands has been very small in comparison to our total exports. The exporter is forced to supply the War Finance Corporation with full information regarding the contemplated transaction, his own financial standing, and that of the importer abroad. This organization obtains for itself whatever supplementary information it deems necessary, and then passes upon the advance requested in much the same way as the commercial banker. If successful in his plea, the exporter secures his money.

As most of the advances made have been against cotton, grain, and other agricultural products, it is clear that American exporters as a class have little interest in the technical details involved in this method of finance. Our government does not follow the guarantee plan adopted in England.

V

The past few years have seen constructive legislation enacted by Congress in its desire to further our foreign trade. The Webb-Pomerene Act has made possible the export syndicate composed of competitive domestic organizations, and the Edge Law has made possible the establishment of banks permitted to engage in that type of financial transaction which requires a greater period of time than those of the commercial banking variety. A legislative policy which has for its object the welfare of our foreign traders assures them of their ability to secure the passage of such laws as will give them equal opportunities to combine and expand in the same direction as may be followed by foreign competitors. The European nations have gone far in this direction much to the advantage of their merchants.

As this brief article indicates, a government has in its hands various means to promote or hamper the international trade of its citizens. Assuming that our merchants and manufacturers in great numbers have both a sincere desire to sell their wares abroad and the acumen necessary to crown such efforts with success, as all are agreed is the case, it is essential that the American public make certain that our government systematically lend its aid to any sound program which enables it to secure a fair proportion of the world's business.

THE PREPARATION OF OFFICE CODES

BY FREDERICK E. REIN*

PART I—PLANNING THE CODE

HOW many unnecessary operations are performed and paid for in your office? This article points out causes of waste due to unnecessary operations in the compiling of records, reports, and statistical information, and indicates how they may be avoided. It also shows how these wasteful operations frequently result in errors, and makes suggestions as to their elimination.

Mechanical equipment for recording, sorting, summarizing, and tabulating business information of all kinds has found its way into general use. It has almost entirely superseded the slower and more costly hand methods, except in very small concerns. This equipment is operated at great speed with mathematical exactness, requiring, however, all names, descriptions, and symbols to be expressed and recorded in numerals. It is for this reason that codes have become a necessary part of up-to-date methods of compiling business facts and figures.

Investigations have shown that there has been no standard practice developed for preparing and using codes, and that most users of mechanical equipment have attempted to work out their individual problems according to the ideas of their own executives or clerks. In many cases this has resulted in complicating the codes by unnecessarily increasing the number of code units.

As every unit in a code number involves several operations for both clerks and machines, and as every extra character and letter used cause additional operations to be performed, the elimination of unnecessary code units, characters, and letters is an essential requirement of economical operation.

The principles and methods explained in this article have been thoroughly tested. Their application will assist the executive in simplifying his codes and in bringing about substantial reductions in expense.

II

Every industrial organization of any size must tabulate and record information concerning sales, orders, credits, production, labor turnover, idle time of machines, and numerous other factors. While operating details differ widely among the various concerns, and many executives find subjects for codes peculiar to their own business, it is true that the fundamental principles of coding apply equally to all. Information quite generally required in connection with the subjects mentioned is suggested in the following list:

Sales and Orders

1. Location—By state, county, city or town, or
   By territory, or
   By branch office, or
   By salesman
2. Population
3. Name of customer or dealer
4. Description of product—grade, size, style, color

Credits for Products Returned

1. Location
2. Name of customer or dealer
3. Description of product
4. Cause of return

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Advertising
1. Medium used
2. Location of prospect
3. Name of prospect
4. Description of product

Production
1. Name of works (if there is more than one)
2. Description of product

Labor Turnover
1. Department
2. Cause of separation
3. Length of service

Machine Idleness
1. Department
2. Name of worker (Usually clock numbers provide the code)
3. Name of machine (Machines usually are numbered)
4. Cause of idleness

In designating the items of information represented by the codes, divisions, such as location, name of customer, and description of product are referred to as groups of information. Subdivisions of the groups of information, such as state, county, and city under the location group in the example given for sales and orders, or the subdivisions of grade, size, style, color, under description of product, are referred to as parts of information.

Code numbers assigned to the different groups of information are called elements of the code, and numbers assigned to parts of information are referred to as sub-elements of the code.

A code unit means one numeral or position in the code numbers.

III

There are five steps to be performed in planning a code.

1. Secure a complete list of all the information to be recorded.

2. Make a thorough study of each group of the information. Where necessary divide the groups into parts and prepare lists of the parts. This may apply to such groups as location and description.

3. Examine the items on all lists of parts of the information for the possibility of combining parts and also for the detection of exceptional items.

4. Determine the number of code units necessary to record each part and each group of the information.

5. Assign a code number to each item on each list of the information.

In carrying out the first step, a study of current code requirements is not enough. To avoid the penalties of code revision, future needs must be anticipated and provided for. Not only must the numbers assigned to divisions of the code provide for all current items of record, but they must also permit of expansion in the future. It is therefore necessary to secure a reliable forecast of additional items that may have to be added. Failure to make adequate allowance for this may cause great inconvenience and loss for any one or all of the following reasons:

1. The necessity for increasing the number of units in the code during the current year.

2. The reprinting of tabulating cards.

3. The discarding of tabulating cards on hand.

4. The rewriting of the code records.

5. Delays in current compiling due to the change.

6. The additional clerical work required in compiling quarterly, semiannual, and annual reports, because code changes during the current year make separate compilations necessary from the cards bearing the original as well as the revised codes. The names and descriptions must be separately applied to each compilation before the totals can be combined for the reports. The work is practically doubled.

7. The necessity for more care in filing the cards, because provision must be made to keep separate the cards bearing the revised codes from those punched according to the original codes.

That future expansion can be provided for successfully is well illustrated by the layout of a tabulating card to which the writer's attention was recently called. This card had been in use for more than eight years by a large corporation engaged in both domestic and foreign trade, and during that entire time no changes had been found necessary. Codes properly prepared will stand the test of time and will require no revision except under conditions of unusual and extreme change.

IV

When dividing the United States into territories or sections, whether for the purpose of sales or field investigations, the particular requirements of the business must be considered.

The following divisions have been found desirable:

1. New England states
2. North Atlantic states
3. South Atlantic states
4. North Central states
5. South Central states
6. North Pacific states
7. South Pacific states

and

1. Northeastern states
2. Southeastern states
3. North Central states
4. South Central states
5. Northwestern states
6. Southwestern states

Under these divisions the states in each territory are numbered consecutively as shown below:

New England States

1. Maine
2. New Hampshire
3. Vermont
4. Massachusetts
5. Rhode Island
6. Connecticut

North Atlantic States

1. New York
2. Pennsylvania
3. New Jersey
4. Delaware
5. Maryland
6. Virginia
7. West Virginia

If it is possible to arrange the territories or sections in such a way that none will include more than nine states, the code can be expressed in one unit. Territory and state may then be identified by two code units, "00," figure one (1) being prefixed to all New England States, figure two (2) to all North Atlantic States, and so on. The code number for Maine would then be "11," for New Hampshire "12," for Vermont "13," for New York "21," Pennsylvania "22," New Jersey "23," and so on.

The counties in each state are listed in alphabetical sequence, then numbered consecutively beginning with number one. In the state of Maine, for example, we will have:

01 Androscoggin County
02 Aroostook County
03 Cumberland County
etc.

Texas is the only state in which the counties exceed 99 and should be treated as explained under exceptional items in a subsequent paragraph. With this exception two units are sufficient to express the code for counties.

The county numbers are prefixed with the state number which identifies both territory and state. Thus 1101 refering to Androscoggin County and becoming the county number, identifies the territory and state in which it is located.

Cities and towns of less than one thousand population are seldom considered in industrial statistics. In preparing codes, all cities and towns having one thousand or more inhabitants are listed in alphabetical sequence,

then numbered consecutively, beginning with number one in each county. These numbers are prefixed with the county number so that the code number for each city or town is expressed in six figures (000000), identifying city or town, county, state, and territory in which it is located.

It is frequently necessary to prepare comparisons of sales with quotas based upon population. Such conditions demand that the records show the population of the city or town in which each sale was made. Similar conditions in field transactions may necessitate the recording of population on each field record. The basis upon which the population is divided into groups will depend entirely upon the individual problem. Two methods (the first expressed by a single code unit, the second requiring two units) that have been found effective are given below:

0.	Less than 2,500
1.	2,500 to 4,999
2.	5,000 to 9,999
3.	10,000 to 24,999
4.	25,000 to 39,999
5.	40,000 to 99,999
6.	100,000 to 199,999
7.	200,000 to 299,999
8.	300,000 to 499,999
9.	500,000 and over
01.	Less than 2,500
02.	2,500 to 4,999
03.	5,000 to 9,999
04.	10,000 to 19,999
05.	20,000 to 24,999
06.	25,000 to 29,999
07.	30,000 to 39,999
08.	40,000 to 49,999
09.	50,000 to 59,999
10.	60,000 to 69,999
11.	70,000 to 89,999
12.	90,000 to 99,999
13.	100,000 to 199,999
14.	200,000 to 299,999
15.	300,000 to 499,999
16.	500,000 to 699,999
17.	700,000 and over

V

The units in the location codes are then assembled according to the particular requirements; viz.,

1. Territory State County City or Town
   0 0 00 000

   Population
   0 or 00

resulting in either an eight- or nine-unit code.

2. Territory State City or Town
   0 0 000

   Population
   0

resulting in a six-unit code.

3. Territory State City or Town
   0 0 000

resulting in a five-unit code.

4. Territory State
   0 0

resulting in a two-unit code.

From the practically infinite number of codes that might be required for descriptions of products, materials, machinery, etc., a few typical examples have been selected.

Of the five units used to describe style and kind, the first figure refers to color and grade of leather, the second and third figures to shape or last, the fourth figure to style, and the fifth figure to height.

Shoes

Style and Kind	*Size*	*Width*
00000	00	00

Hosiery

Color and Grade	*Size*
000	000

Hats

Style	*Size*	*Dimension*
0000	00	0

Milling Cutters

Kind	*Diameter*	*Face*	*Hole*
0	0	00	00

ENGINES

Model	*Cylinder*
00	0

WATCH CASES

Grade	*Size*	*Style*	*Decoration*
00	00	00	00

WATCH MOVEMENTS

Grade	*Size*	*Style*	*Dial*
00	00	0	00

COMPLETE WATCHES

Cat. No.	*Size*	*Style*
00	00	00

NON-FERROUS METALS

Grade	*Kind*	*Width*	*Thickness*
00	0	00	00

WOODWORKING MACHINERY

Kind	*Style*	*Size*
00	00	00

In the descriptions of woodworking machinery, because of the great variety in the factors to be described, many exceptional items occur. To record each one of these as a separate group of information would result in a code of impractical length and complexity. The exceptional items, therefore, are adjusted to conform with sub-elements of the codes of regular items, by increasing the number of units in their codes to the number of units used for the regular sub-elements and recording them in the same field.

To illustrate this method, consider an exceptional item described as follows:

Kind	*No. of Saws*	*Saw*
00	0	00

Instead of laying out two additional sub-elements to describe "number of saws" and "saw," the code for "number of saws" is increased to two units (00) and recorded in the "Style-Sub-element" column, while "saw" is recorded in the "Size-Sub-element" column. Similarly, in the case of an exceptional item described as follows:

Kind	*Power*
00	00

Power is recorded in the "Style-Sub-element" column and the "Size-Sub-element" column punched with zeros.

To illustrate specifically the methods of code layout I have selected certain examples from the codes designed to meet the requirements of the John Doe Company. The first part of the code to be considered covered the branch sales offices of the company, five in number. The five steps in laying out a code as previously described were performed successively for this group of information with the following result:

Code No.	*Branch Sales Office*
1.	New York
2.	Cleveland
3.	Los Angeles
4.	Dallas
5.	Philadelphia

In this particular case the usual alphabetical sequence of the names was disregarded in favor of the company's established order of listing the branches.

Dealers' codes comprised the second group of the information to be provided for and were so planned that the lists of the dealers' names and addresses supplied all the facts necessary from which to prepare the dealers' records:

1. A numerical record
2. An alphabetical record
3. A location record

Three records were necessary, as when the code numbers were known the numerical record was referred to in order to determine names and addresses of dealers. When the names were known and it was desired to determine code numbers, the alphabetical record was used. When it was necessary to determine the names or code numbers of dealers in any location (city or town,

and state) the location record supplied this information.

In arranging the lists of dealers for the John Doe Company, a set of 6 x 4 inch cards was used, one card being written for each dealer. These were sorted, first by states, second alphabetically by cities in each state, third alphabetically by names in each city. This provided a complete record from which the dealers' lists were written and on which the code numbers were assigned. Three units, or 999 numbers, were assigned to dealers in each territory, to which the territory number was prefixed. Accordingly, each code number identifies territory and dealer.

If desirable one more unit could be added, making a five-unit code (00000), which would also identify the state in which the dealer was located. The code would then be interpreted:

1st figure	—territory
2nd figure	—state
3rd, 4th, and 5th figures	—dealer

The code numbers assigned on the dealers' lists were copied on the 6 x 4 inch cards from which the lists were written. These cards then comprised the numerical record. The reader is

New York Territory

Code No.	*Name*	*State*	*City*
1001	Adams and Co., N. H.	Connecticut	Bridgeport
1002	Anson and Jones Co.	"	"
1003	Burns and Sons, David	"	Hartford
1004	Boscoe and Boscoe	"	"
etc.	etc.		

Cleveland Territory

Code No.	*Name*	*State*	*City*
2001	Aarons and Co., C. P.	Illinois	Chicago
2002	Brown and Co., Inc., T. T.	"	"
2003	Bronson, Asa, J.	"	"
2004	Culver and Culver	"	"
etc.	etc.		

Los Angeles Territory

Code No.	*Name*	*State*	*City*
3001	Bastian and Davis	California	Berkeley
3002	Bush and Co., D. A.	"	Los Angeles
3003	Durant, Inc., Robt.	"	"
3004	Duncan, Chas. K.	"	"
etc.	etc.		

Dallas Territory

Code No.	*Name*	*State*	*City*
4001	Arnstein and Co., F. H.	Arizona	Phoenix
4002	Bromwell, Inc., A. A.	"	"
4003	Buckwald and Son, Thos.	"	"
4004	Brewster and Bro., P. T.	"	Tucson
etc.	etc.		Globe

Philadelphia Territory

Code No.	*Name*	*State*	*City*
5001	Chesterton, A. C.	Alabama	Birmingham
5002	Cleveland, Inc., P. P.	"	"
5003	Cresswell and Cresswell Inc.	"	Mobile
5004	Davidson and Co., Henry	"	"
etc.	etc.		

cautioned against confusing the numerical record with the alphabetical sequence of names on the above lists. A numerical record must completely disregard the alphabetical arrangement of names.

The very common practice of assigning a series of numbers to each letter of the alphabet and attempting to maintain both numerical sequence of code numbers and alphabetical arrangement of names in a single record nearly always ends in failure. It is necessary to guess how many numbers to allow for additional names between each letter of the alphabet. This results in a surplus for some letters and a shortage in others. In a comparatively short time the numbers are necessarily confused when surplus numbers assigned to one letter are used to supply the shortage in some other letter of the alphabet.

In assigning the territory numbers, which limit the number of dealers in each territory to 999, it was considered that this provided amply for present dealers and all anticipated future increases. When it is desired to provide for a greater number of dealers' names, the territory numbers may be arranged 1, 3, 5, 7, and 9 instead of 1, 2, 3, 4 and 5, which doubles the number; or a five-unit code may be used which provides for 9999 names in each territory.

The third group of the information is a description of product, which consists of brass and iron valves. The coding of this product illustrates several very interesting points in code design.

The performance of the second step in planning the code, that is a thorough study of this group of information, leads to a division of the description into the following parts:

Size	Style
Pressure	Pattern
Kind	Grade

A further study of kind and style will suggest the possibility of combining these parts of the information into a two-unit code. Eleven kinds, when treated separately, will require two units. Twenty-nine styles will require two more, making a total of four units to describe kind and style. By combining kind and style it is possible to limit the code to two units. The only disadvantage that accrues from reducing the code to two units is that the omission of a separate style-element prevents sorting and tabulating by style groups. This omission may at first appear as a disadvantage, with perhaps the sacrifice of essential information, but careful analysis of the current and forecasted future requirements revealed that no advantage whatever would be gained by reporting in style groups. In fact, no definite use for such compilations could be anticipated. For this reason it was considered entirely safe to express kind and style in a two-unit code, and all the advantages of a shorter code were gained.

SIZES

Code No.	*Inches*	*Code No.*	*Inches*
01	1/4	14	5 1/2
02	1/2	15	6
03	3/4	16	7
04	1	17	8
05	1 1/4	18	9
06	1 1/2	19	10
07	2	20	11
08	2 1/2	21	12
09	3	22	13
10	3 1/2	23	14
11	4	24	15
12	4 1/2	25	16
13	5	26	18

PRESSURES

Code No.	*Name*
1	Standard
2	Medium
3	Extra Heavy

Kind and Style

Code No.	*Name*
01	Angle
02	Angle, by-passed
03	Blow-off, hand
04	" ", swing
05	Check, angle
06	" , ball
07	" , horizontal
08	" , lift
09	" , needle
10	" , swing
11	" , vertical
12	Cross
13	Cross, by-passed
14	Gate, inside screw
15	" , outside screw
16	" , quick opening
17	Gate, inside screw, double disc
18	" , outside screw, " "
19	" , quick opening, " "
20	Globe
21	Globe, by-passed
22	Reducing Angle, diaphragm
23	" " , lever
24	" " , spring
25	Reducing globe, diaphragm
26	" " , lever
27	" " , spring
28	Regulating globe, key
29	" " , lever
30	" " , spring
31	Safety lever, side outlet
32	" " , top outlet
33	Safety spring, side outlet
34	" " , top outlet
35	Stop
36	Stop, by-passed

Pattern

Code No.	*Name*
1	Screwed
2	Flanged

Grade

Code No.	*Name*
1	Brass
2	Iron

Labor Turnover

Causes For Separation

Code No.	*Name*
01	Carelessness
02	Death
03	Dissatisfied
04	Distance from plant
05	Domestic affairs
06	Grievances
07	Housing Conditions
08	Incompetency
09	Indifference
10	Insubordination
11	Loafing
12	Marriage
13	Moving
14	No reason
15	Other position
16	Sick
17	Strike
18	Wages
19	Work lacking

Length of Service

Code No.	*Time*
1	Less than one month
2	3 to 5 months
3	6 to 11 months
4	1 to 2 years
5	2 to 3 years
6	3 to 4 years
7	5 to 8 years
8	8 to 10 years
9	10 years and over

Machine Idleness

Code No.	*Cause*
01	No material
02	Failure to schedule work
03	Waiting for set-up
04	Waiting for tools
05	Waiting for instructions
06	Waiting for drawings
07	Waiting for inspection
08	Waiting for materials
09	No work available
10	Breakdowns
11	No powers
12	No trucks or trays

While the presentation of the complete codes of the John Doe Company is not possible within the scope of the present article, the examples that have been shown embody the important principles of code design.

COMMON LAW COMPANIES ESTABLISHED BY DEED OF TRUST

BY T. H. SANDERS*

A NUMBER of circulars and pamphlets are in print, written by accountants and lawyers, urging the advantages of a form of organization established under the common law by a declaration of trust, by means of which the property and management of a business concern may be conveyed to a certain individual whose legal position is that of trustee, but whose actual position is that of executive head of the business. It is represented that such a form of organization is in many respects an advantageous substitute for incorporation, and some rather startling claims are made on its behalf.

The subject has been pretty well handled in the legal periodical literature,[1] and there is not much danger that lawyers will be misled as to the substantial facts of the case. Very scant attention has, however, been paid to it in the literature of accounting and general business, and the average business executive who comes across one of the enthusiastic pamphlets referred to must naturally wonder what it is all about, and why more is not heard of it, if the advantages claimed are really as represented.

Broadly speaking, it is stated that any group of business men engaged in a joint undertaking can, by the execution of a deed of trust, convey the title to the property of the enterprise to certain trustees, empower them to act in all respects as the managing executives of the business, limit their own liability, by a simple stipulation to that effect, to the amount of the property embarked in the undertaking, and have in fact all the advantages of a corporation, yet without paying the taxes imposed upon corporations or making the returns required of corporate enterprises by the federal and state authorities. It is also stated that the members composing the trust are, as beneficiaries, liable only for the tax and other obligations of individuals and of fiduciaries. Such a form of organization is bound to look especially attractive under the new Federal Income Tax Law of 1921, to those smaller corporations which are practically the private businesses of a few stockholders.

The fact is, however, that the situation is not as represented, and it will pay any business man to look into the salient facts of the case before giving serious thought to any proposition for a conversion of his business into the form of organization here described. The purpose of this article is to give the outstanding facts.

II

These organizations have been commonly known as Massachusetts Trusts. The laws of that state, until comparatively recent years, forbade a corporation to hold or deal in real estate, and legal wits were naturally busy to devise a method by which several individuals could undertake such enterprises, and the declaration of trust became common in that connection. As, however, the procedure was taken

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[1] For a recent survey of the legal aspects, see *American Law Review*, March–April, 1922, p. 177.

under the ordinary rules of the common law, it is clear that the method was available in other states and in other fields of commercial and industrial enterprise, and there has been considerable spread of the practice.

The deed of trust will usually provide for the conveyance of the title in the property from the several subscribers to the individuals nominated as trustees. The trustees on their part will issue certificates to the subscribers similar to the share certificates of corporations. The certificates may cover a certain number of shares of a specified par value per share, or they may indicate that the owner is the proprietor of a certain fractional share of the whole property. The shares may be made transferable upon the books of the business, either with or without the consent of the other members, and it will ordinarily be provided that the death of a member does not terminate the trust, nor entitle his estate to an accounting, as is the case with a partnership.

The trust deed will accord to the trustees whatever powers of management may be thought necessary for the conduct of the particular enterprise. The members can modify these powers in any way to suit themselves, but it is contemplated that trustees shall ordinarily be clothed with the same authority as any executive engaged in that sort of business would possess; otherwise the financial success of the enterprise would be jeopardized.

In addition to an enumeration of specific powers accorded to the trustees, such as to pay and receive money, to buy and sell goods, to pay the necessary expenses of doing business, to incur liabilities, to sue and be sued, to manufacture the goods which they propose to manufacture (if it is a manufacturing concern), to borrow money, to mortgage the property, etc., a general clause is frequently added to the effect that as regards third parties any act of the trustees in the management of the trust business shall be considered to be properly within the powers of the trustees in favor of such third parties.

The deed of trust will provide for meetings of the members at such times as may be necessary and convenient. It will also specify whether a vacancy upon the board of trustees is to be filled by the remaining trustees or by the members. It will very carefully describe any limitations which it is desired to place upon the powers of the trustees, and what matters, if any, must be submitted to the members for settlement. The clauses covering these points have far-reaching consequences, not only as regards the authority of the trustees in the internal management of trust affairs, but also in questions of taxation and other public relations, as will be seen later.

The agreement will ordinarily mention a term of years for the duration of the trust, in order to avoid the legal complications which are likely in the case of perpetuities, though a leading case[2] in which this issue was raised resulted in a decision that the trust did not create a perpetuity, nor constitute a restraint upon alienation. If the undertaking has a fairly well defined object which can be accomplished in an ascertainable period, the deed may stipulate for the termination of the trust in 21 years from its date; if the business is one which it is hoped to continue indefinitely, it can be provided that the trust shall continue for 21 years after the death of the last surviving subscriber. The point is not of great importance, except that it should be worded to avoid complications, seeing that provision can always be made for renewal.

[2] *Howe* v. *Morse*, 174 Mass. 491.

III

It will be clear that a business concern operating under a deed of trust, drawn in the broad terms outlined above, will have no difficulty in transacting business. In the handling of the day to day affairs, it will be in no sense different from a partnership or corporation engaged in the same line of business; and with regard to the periodical statements of account and distribution of profits, the situation will not be substantially different from that of a corporation with directors and stockholders, the position of the members being similar in most respects to that of preferred stockholders.

The tax situation is a complicated one, and no very general statements can be made. The most that can be said in a general way is, that such an organization will be exempt from paying those taxes and from filing those returns which the law requires specifically from businesses which are incorporated under state laws, either general or special. But this is as far as one can safely go, and as a matter of fact most tax laws are enacted in such terms as to include trusts of this kind under the general heading of "associations," where they are taxed in the same group with corporations. A few instances will illustrate the situation much more clearly.

It is perhaps natural that the Commonwealth of Massachusetts, which has seen a greater development of this form of organization than any other state, should be somewhat lenient in its treatment of them. At present a common law trust is classed, for purposes of taxation in Massachusetts, either as a partnership or as a fiduciary; no question is raised as to any corporation status or resemblance; and they are subject neither to the Corporation Income Tax (which is based on the federal return), nor to the excise tax on corporate excess, nor to the duty of filing the annual Statement of Condition required of all corporations. The Rules and Regulations of the Commissioner[3] describe in detail how income tax is to be levied on trusts, some of which have the option of electing to have their income taxed to the trustees as such, or to the individual members to whom the income is distributed. This situation with regard to state taxation reflects the trend of a long line of decisions in Massachusetts courts, in which common law trusts have been held to by either partnership or true fiduciary agreements; but in which there appears absolutely no remark which might suggest treating them as corporations.

Other states, under various influences, have been less hospitable to common law trusts, and there is not the same tendency to avoid the suggestion that they might be treated as corporations. A case before the Michigan Supreme Court,[4] for example, held that a "blue sky" law of the state of Michigan, requiring "every person, corporation, copartnership company or association" issuing and selling stock first to get permission from the Michigan Securities Commission, was binding upon a common law trust.

A decision of the United States Supreme Court[5] established the fact that trusts of the kind under discussion derive no powers or advantages from the statutes of any state, and therefore are not subject to the federal excise tax, which, it was briefly stated, is "imposed upon doing business in a corporate or quasi corporate capacity."

[3] In the 14,000 Series.

[4] *People* v. *Clum*, Mich. Sup. Ct., 1921, 182 N.W. 136.

[5] *Eliot* v. *Freeman*, 31 Sup. Ct. Reports 360 (1911).

IV

It is the federal income tax, however, which occasions the most painful concern to people interested in the trust form of organization, and the situation needs to be carefully stated in order to be properly understood. In the case of *Crocker et al.* v. *Malley*,[6] the United States Supreme Court held that the organization there involved was not a corporation and was not subject to taxation under the corporation schedules of the federal income tax. This decision was hailed by friends of the trust form of organization as being a considerable support to their representations. A careful scrutiny of the facts of the case and of the terms of the decision will reveal, however, that it is nothing of the kind, but is only of very limited applicability. In this case the trustees held shares in a subsidiary corporation which operated a number of mills; the trustees received the dividends upon those shares; the subsidiary corporation had, of course, already paid income taxes as a corporation; the trustees did not control the management of the corporation; the tax collector sought to have the trustees treated as a second corporation and to assess them *again* upon the dividends which they received from the subsidiary. The decision merely held that this could not be done, and that the arrangement in question was very different from that of a holding company such as was subject to corporation income tax, under the then existing law.[7]

Following the terms of this and other decisions of similar tenor, the Internal Revenue Department has issued a number of rulings which cover the subject in detail. The substance of these rulings may be stated very briefly. Trusts are divided into two classes:

1. Those in which the beneficiaries control the management.
2. Those in which the trustees manage the business independently of the members.

The former are held to be "associations," and are taxed as corporations; the latter are held to be trusts, and only the members as individuals are subject to tax. This is made still more definite by the fact that the rulings set forth the following propositions:

1. A trust in which the trustees hold the majority of the voting stock is controlled by the beneficiaries and is to be treated as a corporation.
2. A trust in which the men who actually manage the business own a substantial amount (even though not a majority) of the voting stock, is controlled by the beneficiaries and is to be taxed as a corporation.

The following references will be found to support the above brief statement of the facts:

Office Decision No. 598 holds that "since the parties associated reserve to themselves the right to direct and approve the terms of sale of the property deeded to the trustee, and the trustee is authorized to call upon them to pay certain items if the income of the trust is insufficient, the organization, for income tax purposes, is not a trust but an association which is required to render income and profits tax returns in accordance with provisions of the law governing corporations."

Office Decision No. 620, on the contrary, deals with a case where the trustee has "absolute control over the affairs of the trust and to distribute the net income periodically at intervals no more than a year apart. In short, the trustee was given all the rights

[6] 39 Sup. Ct. Reporter 270.

[7] Act of October 3, 1913. Corporations now by item 26 of the Corporation Return enjoy the same privilege as individuals, of deducting dividends received from Corporations which have themselves paid income tax.

and powers which would have been his if he were conducting a business of which he was the sole owner." In this case the organization was held to be a trust, not subject to corporation tax.

Solicitor's Opinion No. 56 contains a recital of powers accorded to a trustee which were substantially identical with the combined powers of the directors and stockholders of an ordinary corporation. The opinion then continues:

> It therefore becomes necessary in this case to lift the trust veil and determine to what extent the beneficiaries of the trust in fact control its management. Where all the shares of beneficial interest in a trust are owned by the trustees as beneficiaries, it is perfectly evident that, the trustees and beneficiaries being identical, the latter in fact control the former, even though no control is vested in them under the terms of the trust instrument. This is no less true where the trustees..............are the owners or beneficiaries of a majority in amount of such shares. Or where the trustees own the legal or equitable interest in a substantial number of certificates sufficient to permit them to dominate the affairs of the trust and they are in fact managing and supervising its affairs, the organization should be taxed as an association and not as a trust.

Office Decision No. 654 relates to another case "in which the beneficiaries have voice and control, inasmuch as they themselves are at the same time trustees and principal owners." Following the rule, this was considered to be an association subject to the corporation income tax.

Solicitor's Opinion No. 49 presents a much more complicated case; yet the result is that the organization was held to be an association because the bondholders controlled the trustees in their operations. These rulings are reproduced in substance in paragraphs 1502 to 1505 of the new Regulations 62 relating to the Revenue Act of 1921.

The Revenue Act of 1921 re-enacts the stamp tax of 5 cents per $100 upon certificates of stock ownership issued by corporations. Businesses operating under a deed of trust have been adjudged liable to pay this tax, inasmuch as it is levied upon a "muniment of title."[8] It does not matter whether the concern is incorporated or not; if it uses a document of this form to evidence the ownership of its property, it is subject to this particular tax.

The rulings upon the capital stock tax are identical with those relating to the federal income tax. Article No. 1 of Regulations No. 50 states that this tax is levied upon corporations, joint stock companies, and associations. Article No. 2 states that associations include companies formed under a declaration of trust. Article No. 7 adds that Massachusetts trusts are associations if the beneficiaries are in control of the management.

The sum total of this examination of the tax situation is that the precise nature and terms of enactment of each tax must be carefully studied to ascertain whether an organization doing business under a declaration of trust is liable for it. No broad rule can be laid down to classify it as a corporation or as a group of individuals.

V

Next to the tax situation, the matter of greatest interest connected with these organizations is probably their status in regard to limited liability. The deed of trust will usually state that creditors of the business must look only to the trust property for the satisfaction of the trust debts, and it is further required that a stipulation to this effect shall be included in every written contract made by the trustees

[8] *Malley* v. *Bowditch*, 259 Fed. 809.

in the course of the trust business. Cases have nevertheless been through the courts in which doubt was raised on this matter, and it cannot be said even now that the matter is settled beyond question. Here, too, as in the case of taxation, no statement of universal application can be made.

Under the common law the members of the trust cannot be held liable for anything beyond the specific property they have deeded to the trustee, though it is usual to reinforce this by a stipulation of limited liability in the deed of trust. Neither could the trustees be held liable to an unlimited extent upon a contract in which a condition of limited liability was expressly included and clearly understood by the creditors. But leading decisions and statutory enactments which shall give a generally recognized status to trusts still remain to be made, and until then the extent of the liability of the trustees will continue to be an arguable matter in all cases where there is reason to question whether the creditors clearly apprehended the situation.

VI

In every case where the taxability of common law trusts has been before the courts, the determining factor has been found in the precise nature of the tax, and the wording of the statute which levied it. It follows that the trusts can be made subject to most of the taxes by specific wording which shall include them; what is more, needy legislators in search of taxable material are not likely to overlook them.

But something more is desirable than a mere contest of wits between the taxing authorities and the taxed corporations. It is the sense of being subjected to undue discrimination that puts corporations into a mood to feel around for evasive methods; and as a matter of fact the abolition of the surtax has removed what has been one of the leading incentives to discussion of the trust form of organization. In the long run more can be accomplished by the steady development of a public opinion which is aimed on the one hand at a substantial reduction of taxation, and on the other at persuading legislative authorities that corporations are not necessarily maleficent members of society which may rightly be subjected to special burdens.

As a business instrument the corporation has proved to have many practical advantages; the trust is not nearly so well tried. It has one distinct disadvantage, in that the management is not so responsive to the wishes and interests of the members, as in a corporation where the majority of the stockholders can change the directorate. The balance of argument will in most cases be found to be in favor of retaining the corporate organization, with the hope that more direct and substantial methods of relief may be found than that of merely resorting to another form.

There has been no intention here to express an opinion upon the justice or injustice of any one tax; corporations probably have not been so unfairly burdened as their more extreme advocates tell us. On the other hand, the presence in legislative halls of a certain amount of unintelligent suspicion of corporate enterprises is not to be denied, and it is the business of public spirited men to work towards its removal.

DIRECT SELLING AS A SALES POLICY

BY SOLON E. SUMMERFIELD *

A SALES policy without salesmen. That is the shortest way of defining the method under which we are working at present and have been operating for a number of years. That it is practicable is demonstrated by the fact that we are oversold and are working to catch up with orders. Another point to its credit is that our business has shown a healthy growth and progress under this system.

Probably most men know the "mousetrap" quotation:

> If a man write a better book, preach a better sermon, or make a better mousetrap than his neighbor, though he build his house in the woods, the world will make a beaten path to his door.

As a business axiom, in these days, that may be insufficient; but as a foundation upon which to build, a principle from which to work, it is sound and essential.

Perhaps you have noticed that the articles named in the saying are all things that are wanted by certain publics, things for which there is a constant demand. For success in manufacturing the producer should first of all decide upon a product which has a steady market—a public that wants it; he should then turn his attention to improving his product, following the advice of the saying; and he should then tie it up with an amount of dignified and regular advertising. The best salesmen are the repeated demands for a product from satisfied customers.

The story of Gotham Hosiery is the story of a closely allied group of associates with a small staff who cast their fortunes together and worked patiently and consistently. There were two of us who started in on this commercial project together and have worked out the system applied to the manufacture of our product. As the years have passed and we have grown, from time to time others have come into the company and become part of the organization. Most of the people connected with any branch of the Gotham Hosiery Company have been in their jobs for some time and are responsible for some integral part in the success of the whole.

Before we started the manufacture of silk stockings my associates and I had a ribbon factory whose former owner had said that it was making from $25,000 to $35,000 a year. We know now that that man was one of the world's greatest optimists. But with a borrowed $25,000 we took up the ribbon plant.

It did not take us long to find out that the machinery was next to useless. We could not make high-class ribbon, and it was hard work selling what we did make. At the end of a year of desperate struggling we were just about where we had been when we started. Making ribbon did not appear to be our forte. So we decided to try manufacturing something else.

That was in 1909. Silk stockings were just beginning to be popular. Up to that time they had been a luxury and considered impractical as garments for steady and hard wear. It soon became evident that silk stockings that would wear were a paying proposition and after a struggle of six

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months, caused by lack of a bank account, not by any failure to market our product, we determined to profit by the "mousetrap" quotation.

The first step was to make silk stockings manufactured at our factory of as good quality as possible. Consequently we sought every available method of making silk hose that would stand hard wear. Our second move was to find some identifying mark which would have actual sales value.

The weak point in all stockings is the drop stitch. Every woman knows that most "runs" are caused by the garter clasp and that when one starts it goes the length of the stocking unless something stops it. We solved the problem with a specially woven top, and the phrase "No run goes below the Gold Stripe" became our selling slogan.

During this early period the factory was represented by salesmen on the road. Our stockings were sold throughout the country. Regular orders and a steady demand outside of New York furnished us plenty to do.

But the fly in the ointment was that New York dealers would not handle our product. Department stores in the metropolis either would not buy or did not give the product a fair show when they did have it on their shelves. We saw only one way to meet this problem and that was to sell the product in retail stores of our own. Our first shop of this kind was a small place on West Thirty-fourth Street. It was a modest place, very modest indeed, and anything but conspicuous, but the keenest shoppers in the world found it. They were the girls who themselves sold goods over the counter. They came to trade during their lunch hour and after work, so that our busiest times were from 1 to 2 and from 5 to 6 o'clock. The first day's sales in this shop totaled $27.35. Gross sales for the year were $51,304.

This first shop opened in October, 1911. In February, 1913, the shop was moved to a better location a little farther down the block, and in August, 1918, over close to Fifth Avenue. In 1915 a tiny shop eight feet wide was opened on Fifth Avenue just above Forty-second Street, and a third shop has just been opened on Upper Fifth Avenue. The first two shops have been doing a business of a million and a half dollars annually.

There are 18 salesgirls in the little shop on Thirty-fourth Street; and, although seats are provided, they are rarely occupied. The clerks are as close to each other back of the counter as they can stand and show stockings. One reason these little shops can do such an enormous business is that there is so little of what is known as "shopping" or "just looking." Nothing is sold except Gotham hose. Any woman who enters one of the shops goes there for Gotham hose and nothing else. It takes only a few minutes to supply her wants, and she is out and makes way for another customer.

Since these shops have proved the success they are we have had unbelievable offers to permit other articles to be sold in them, but we have no intention of permitting any other article of merchandise to be sold there.

The trade with which we started, young women who work in offices or shops, we have held and greatly enlarged. Besides our own small shops, more than five hundred other small shops in New York which sell women's garments are handling Gotham Hosiery. Most of them carry the trademark on their windows. It is the business girl who patronizes these shops and from the number of these little stores I should say that there is scarcely a district in New York where Gotham Gold Stripes cannot be bought. Just to satisfy our pride, let me men-

tion the fact that the department stores are coming to us now.

Strengthening the market by strengthening the product is our hobby. I once made the statement that I should like to be able to make hosiery that would wear for longer periods, a lifetime if possible. Few persons outside my associates paid any attention to it, but it is my penchant. Why not? Life-time products do not cut off business. For instance, the fact that the average family buys only one piano has not cut off the piano business.

It was this principle of strengthening our product that rescued us during the war. The rigid economy which was necessary for many people, and advisable for all, frowned upon the silk stocking. There was still enough of that old prejudice handed down from the luxury idea to put it on the list of things inadvisable.

Our business was growing rapidly and we knew that there was an economy angle attached to it. Our customers were notified that for a reasonably small amount they could have repairs to their stockings made which would put them in perfect wearing condition again. These services have been continued and are as popular today as they were during the war.

Our product is simple and stable. We do not have any excessively high-priced stockings, nor are our cheapest ones too cheap. It has always been our method to make stockings up in the natural silk and then dye them afterward. Meeting the demands of style we found that the call for colored stockings to match colored shoes and costumes dovetailed with this custom of ours. Stockings are dyed to match any shade without extra charge.

Our direct telephone connection with the little shops gives us an index of what our customers will want. We are able to furnish our trade throughout the country with what Fifth Avenue is wearing. And what Fifth Avenue wears, the rest of the country will wear.

The young women employed in our shops work on a sharing basis. The managers of each shop are responsible for their staffs and report to the executive office. Throughout this business we try to employ persons who will develop and take a personal interest in it. Every employee receives automatic raises in salary and must take a proportionate amount of responsibility. Without boasting we can say that there is no store in the world that does the volume of business a square foot that is done by our Thirty-fourth Street shop.

As to advertising, The Gotham Company believes in it. At present we run advertisements on the Fifth Avenue busses, and in the programs of the New York theaters. For the last year we have been having a page each week in one of the trade journals.

When we started the manufacture of silk stockings my staff and associates numbered 20 persons. We had four machines for making hosiery. Today we have more than 650 persons working on our force, and with the opening of our new factories, 500 will be added. There are 25 employees in the executive offices. The manufacturing and shipping are attended to at the factories. All the clerical business is handled through the office on Fifth Avenue.

In 1917 we called in our last salesman from the road. There undoubtedly are many businesses where these gentlemen are necessary, and I do not mean to deprecate their line of work. Neither have we any complaint against those who worked for us. It is simply that we have found other and more efficient methods of selling which suit our business.

Perhaps every man who establishes

his own business and "brings it up by hand" himself, as it were, finds it impossible to work on any except the most personal lines. I cannot let go my personal touch with this business. My staff is competent and works smoothly without my supervision, but for my own sake I keep a close hold upon every detail—just because I am vitally interested in it all. No doubt this dates from the days when I had to be my own office boy.

In doing away with salesmen I was applying this personal principle. During the time in which we employed men to go on the road with our product our business continued to grow with the same increasing percentage until today we are doing six times the volume of business that we were doing in 1917.

In all fairness to salesmen in general I might say that those men who sold our product took care of that phase of the work at a time when it was necessary for us to devote our entire attention to manufacturing the product itself. With that part of the business developed we could turn our attention to carrying on the sales end, and so the salesmen served as a stop gap or a means of tiding over an important part of the work while the necessary production equilibrium was established.

It is my conviction, born of my own experience, that one of the best things manufacturers can do to improve their business is to become retailers. This they need do in only a small way, but I feel that it is to the little shop on Thirty-fourth Street, and its sister shops, that we owe our knowledge of how to sell our product.

We maintain no credit department in the Gotham Hosiery Company. A history card is filed for each customer, and new credits are allowed only when first credit standing is shown. After the account is opened all invoices are placed in an automatic file and mature 37 days after the date of the invoice. A customer thus has 30 days' credit and 7 days of grace. If a bill is not paid in this time a yellow card is sent to the shipping department, and all shipments are held up until payment is made. The result of this plan is that bad accounts are practically unknown.

AXIOMS OF INDUSTRIAL EFFECTIVENESS—I

BY C. E. KNOEPPEL*

WHEN one reads that 60 per cent of the concerns of the country fail sooner or later; that only 50 per cent of them pay dividends; that only 6 per cent know their costs; that 800 out of 1000 new concerns fail, reorganize, or change managements at least once, 200 at least twice and 50 three or more times, it is high time to pause, take stock, and indulge in some straight-from-the-shoulder language.

Can it be said in the face of the above that the accountants and industrial engineers of the land, after a generation of the hardest kind of work, have succeeded in "putting over" their philosophy and practice in the *biggest* kind of a way? Hardly!

Whose fault is it, then, that American industry cannot make a better showing than that indicated above?

Twenty years' close observation of industry convinces me that the responsibility can be placed squarely on the shoulders of those who control and direct industrial activities, and all because there has been too much individualism, too little co-operation, too many divergent ideas on how business should be run, too much banker domination, too much incompetence and inexperience in high places, and too little use of fundamental economic knowledge in the conduct of our industrial affairs.

A bitter arraignment, perhaps, but one which research will reveal to be justified.

Do not think for a single moment that the accountants and engineers have made no mistakes, and that they are blameless. Far from it. Industry, however, has had abundant opportunity to separate the wheat from the chaff and to use the wheat as industrial nourishment; to throw out the bad and adopt the good. That the industrial leaders have not done so, to the extent possible, is then the fault of the leaders.

II

The basis of commerce and trade is strictly economic in character, with price affecting both buying and selling as its keystone, and it is becoming more and more apparent to industrial leaders and executives that there is not the relation existing between cost and price that has been generally supposed; that price-making today is more of a hit-and-miss than a scientific proposition; that too often guess-work, whims, individual opinions, and snap judgments govern the determination of what a fair price is. As stated by Sir Johnstone Wallace, Chairman of the British Federation of Iron, Steel and Metal Merchants:

> The great need of the business world today is a sound price, a price which bears a direct relationship to economic fact. It is the discovery of that price which constitutes our biggest problem.

The task here, then, becomes one of determining the elements in price, of ascertaining why costs and costing have not had more of a direct relation to prices and price-making, and of developing such laws of cost and price relationship as will be sound and economic, stabilizing in their effect, and of practical use to executives, accountants, and engineers.

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Something of the kind is absolutely essential, for it must be obvious to any real student of industrial activities that the usual costing procedure in the average industrial plant, based as it is on the accountants' strict interpretation of how costing should be done; on purely financial considerations of the banker and controller; on forms, red tape, elaborate rulings and involved statements; on hair-splitting over accounting principles fanatically adhered to; on production each month absorbing *all* the costs of that month, is as effective from an economic angle, from the standpoint of stabilization of industry, proper price-making, and of value to all branches of a business, as a fifth wheel on a wagon or an additional tail on a cat.

A long and intimate contact with industrial conditions has led to the development of certain fundamental business concepts, self-evident truths, and obvious conclusions, or "axioms," covering price-fixing and other conditions affecting industrial efficiency. A presentation of these will no doubt help to focus the attention of industrial leaders and executives, financial heads and bankers, and accountants and engineers, on a program which can be accepted as sound, economic, and vitally necessary to the future success of American industry. These axioms will be treated each under its own heading.

III

Consideration of all factors in costing and pricing is the only protection against unintelligent competition.

When you read 10 different specifications covering overhead items, as furnished by 10 different firms, with no two of them alike; when you find that 25 bids on a casting specification vary in the ratio of 2 to 1 between the highest and the lowest; when there is a ratio of 4 to 1 in bidding on a standard boiler specification; when you constantly observe the widest variations in the prices of the same product, is it not fair to say that in a general sense industry does not know what it is doing because of lack of uniformity in costing procedure?

When one man says his overhead is 250 per cent and another states his as 175 per cent, is not the comparison meaningless until one knows that the elements in the two overheads are the *same* and the method of distribution to production *identical?*

In the war days I remember seeing a large and elaborate compilation on a sheet big enough to cover a large table, giving the comparative rivets driven in a number of shipyards. It did not show the size of rivets driven, nor the hours worked per day, nor the number of men in each riveting gang. Rivets driven per day per yard was the guage of results. Of what value was the compilation? About as useful as to say that a man walked 20 miles. To judge his performance we must know how long it took him, under what conditions he walked, and whether it was a continuous walk or a series of walks.

What will be the combined effect in industry of the hit-and-miss methods of costing that are found in plant after plant, due to the individual ideas and notions of the owners and executives? In one case you will see overhead apportioned to direct labor value, another will apply it on man-hours or man- and machine-hours. Still another will apply it on total direct labor and material cost. In one case shipping or testing or painting will be included in direct labor while in another they will be classified as indirect labor, therefore, part of the overhead.

One will figure depreciation in his costs monthly, another will deduct it

from profits at the end of the year, and if there are no profits, ignore depreciation for that year. In one case selling expense will be apportioned to production, while in another it will be figured as a percentage of sales. One will include interest on investment and on borrowed money in costs, another will consider them a deduction from profits. One concern will use last month's costs for this month's calculations, another will use an average for the year, still another will use a predetermined standard based on normal capacity. One concern will use a departmental overhead rate, another will use a flat percentage to cover all departments, and so it goes; the variations being based on industrial whims, some of them ridiculous in the extreme as in the case of the comptroller of a Pittsburgh concern who gave orders that any repairs on machines *should be charged to the jobs on the machines at the time the breaks occurred.*

Years of actual observation of costs systems in hundreds of plants lead me to make the statement *that no two have been found exactly alike as to principle, law, and practice.* Application must of necessity vary with the conditions in a given plant, but basic fundamentals should be the same and must obviously be the same if industry is going to get at a price which bears a direct relationship to economic fact.

In other words, there is little if any uniformity in our modern accounting and cost practice. Put 10 recognized specialists in 10 plants in the *same* industry and there will be 10 different systems as to basic elements. As regards uniformity *between* industries, the situation is even worse. Individual theories, freak plans, unusual applications must give way, under the proper direction, governmental or industrial or both, to uniformity in accounting and cost practice, in each industry and between industries, that we may in time have the same economic basis as our industrial foundation.

IV

The best insurance against loss in producing and marketing goods is to work to predetermined standards.

An order taken at cost, or low margin of profit, is watched, nursed, and coaxed along by all interested in order that there may be no loss, or the loss kept as low as possible. *Why should not this same careful attention be given to all work?*

If you know *in advance* what time a given piece of work should take to produce, you have then a means for *currently* watching performance, to insure that the actual results will not be miles away from what the work should cost.

If you know the volume of sales that you should have for the next six months, you will come nearer to securing the anticipated volume than if you had no mark to try to attain.

If you can determine the margin of profit you should earn for the coming year, efforts will be made to secure this profit, whereas working on the "trust-to-luck-there-will-be-a-profit" basis, is a sure way *not* to secure it.

When a concern can secure actual costs within 10 per cent of the standards set; when a concern can budget sales for six months ahead and *exceed* the budget set; when a concern can estimate in advance an inventory reduction of $1,000,000 and secure this reduction *within a few thousand dollars,* there is positively no excuse for ignoring the wisdom of this conclusion—determine in advance what costs should be, what sales are expected, and what profits are possible and then currently watch results, determining reasons for any variations from standards.

This spells predetermination and

budgeting, along with controls, established to match results with estimates.

That concern is best protected against the uncertainties of commercial competition which is most closely in touch with its own current facts and happenings.

Time was when most concerns were content to make a yearly reckoning of where they stood, what they had earned, and the like, and felt that to calculate any more often was so much "red tape." And strange as it may seem many still believe in this practice and seem blind to the benefits which would accrue from a more frequent check on things.

The complexities of modern business demand more than an annual or even semiannual review of business affairs. Monthly, weekly, and even daily information is today a positive necessity. Monthly statements as opposed to yearly statements means 12 times the opportunity for analysis and review of what has happened, and yet there are concerns even today waiting until the "end of the year" before *knowing* where they stand.

One sales manager that I know of is advised daily in statements and graphic charts as to actual sales against the sales budget, orders received, and orders shipped, inventory reduction against the expected reduction; and as a result of this *daily* knowledge of sales conditions, is doing as well in marketing a semiluxury product in these times as his company did in pre-war times.

A production manager in another plant knows daily the variation between performance of machines, men, and departments, as against what they should produce, with the result that he is in a position to *anticipate* any failure to produce in an efficient manner. What chance would he have to eliminate waste and inefficiency if this information was furnished monthly or yearly?

If there is anything at all in the statement that "Management is the wise use of co-ordinated knowledge," then this conclusion is sound: Keep posted daily, weekly, and monthly through proper records, presented in statement and graphic form, as to the pertinent and important facts and happenings.

No division of a business should be served at the expense or to the exclusion of other important divisions.

No accounting machinery is complete which considers one division of a business without due reference to the others. I can best illustrate what I mean by an actual experience.

In a midwestern plant a debate arose between the treasurer and the production manager, as to the kind of costs to arrange for. The treasurer was interested in statements, reports to directors, data for his banks to aid him in negotiating loans, what had been done in comparison with what was being done, with the result that figures, statistics, and the like were his prime consideration, from which he attempted to say how the business should be run.

The position of the production manager was that the chief function of the business was to manufacture its product, with the forms, systems, figures and statements incidental thereto, and of secondary importance. He felt that he was there to produce goods and not reports and figures. He wanted predetermined times and costs with due consideration to inefficiency, idleness, and rejection data, not past events which everyone had forgotten. He wanted the costing to provide for future possibilities as well as record current facts *currently*.

In other words it was the same fundamental quarrel between the accounting and banking mind as opposed to the engineering and manufacturing mind.

In industry both in whole and in part, there are three distinct major divisions; no more and no less—buying, processing, and selling.

The financial division being part of the business as a whole, of which the three divisions just mentioned are sections, should be concerned with facilitating the work of all these sections, and therefore does not measure up to its possibilities to the fullest extent possible if it ignores or considers only passively any one of the three. Consequently any financial accounting which does not properly help these three divisions is fallacious, misleading, and dangerous. That is why the usual "banker management" in industry is academic, reactionary, and inefficient; it gives too much time and thought to money, statements, collections, borrowings, credits, keeping down repairs, shunning new equipment until the last, and not enough to buying, making, and selling.

Nor must the prime consideration be with reference to the manufacturing or the selling, as there would then be too much machinery with reference to engineering and distribution matters. The only safe conclusion is: Develop accounting methods with reference to their utility to the purchasing, manufacturing, and selling divisions, the financial requirements being considered fully and properly *with reference to all three.*

Averages should be used with caution and with the fullest realization that some items are above and some below.

It would seem that this axiom should be accepted without question because of the danger of ignoring extremes and yet every so often average overhead rates, average costs per unit, average prices are used without regard to the effect of such a practice.

If space permitted I could cite case after case of the pernicious effect of pinning too much faith on the law of averages. If castings are sold at any average price per 100 pounds, someone is paying too much for his, and others not enough. If an average overhead is used in all departments, some departments pay too much and others not enough, all of which is reflected in the cost of the product.

If one article costs \$5, another \$3.50 and still another \$2, they do not cost \$3.50 each, because this happens to be the average cost. This spells the ignoring of averages whenever it is possible to do so.

Productivity in the last analysis is the real guage of economy in manufacture.

What is the real product of an industrial plant? Is it the engine, or boiler, or box of candy, or suit of clothes? Is it the thing that can be seen and used? Or is the product something more indefinite and intangible?

Proper reflection will show that the *real* product of a plant is a "time-composite," the hours and minutes of floor space, of machines and of men (from president to office boy) spent in producing the *visible* manifestations of our industrial process.

Even the material that a given plant uses in making a finished product is a "time-composite" of other concerns, which is the case with all materials until we get back to natural resources —trees, minerals, animal life, plant life—in the exploitation of which "time-composites" enter in to some extent.

Naturally, therefore, "productivity" or the *relative* amount produced per hour or per day per man or machine, becomes the true measure of economy. It is because this is true that so many concerns get into trouble when they ignore this important fact. Two cases will illustrate what I mean.

A large steel concern lost nearly one

million dollars because it bid on the fabrication of a steel building on a tonnage basis. The work was of the cranky, complicated, small piece variety, so well known in certain kinds of steel building work. Instead of determining what time it would take to lay out, punch, shear, fit, rivet, and countersink the various parts, each operation was calculated at so much per ton, in which calculation relative times were ignored. The loss woke up this concern and the new proposals were estimated on the basis of *time* spent on the various operations.

A jobbing foundry bid on the iron castings for a manufacturing company at so much per 100 pounds for the entire run of patterns, and was shocked to learn that it was receiving the light, complicated, cored work and not the "chunk" stuff which would have meant tonnage. This was simply another case of ignoring relative productivity.

In other words unless the "time-composite" is recognized there can be no distinction between the fast- and slow-moving jobs and the result is that the cost of the light work is not enough and that of heavy work too much.

The work of a man producing 500 pounds per day is more costly than of a man producing 1000 pounds. It does not follow that the cost of cleaning or painting or crating the latter is twice that of the former because it *weighs* twice as much. A man is more efficient who produces 5 pieces per hour than one who produces 2 pieces per hour of the *same* work, regardless of the size, weight, or nature of the piece.

This seems clearly to establish the soundness of the conclusion—the hourly basis should be used in determining the efficiency of production and for distributing overheads.

That concern which is best posted as to idleness, inefficiency, and rejections is in the best position to eliminate these industrial wastes.

The matter of "waste in industry" has been receiving more and more attention by executives, labor leaders, and engineers, and it is fair to assume that the interest in the subject will continue as the years go by.

In "Maximum Production" published in 1911, the writer said:

> In all industrial pursuits, there are many wastes which can be made to yield satisfactory returns. Careful investigation in the majority of institutions will soon disclose the fact that the chief wastes are due to time losses, wasted materials, too much equipment, lack of intelligent planning, poor and insufficient facilities, equipment improperly maintained, etc. . . . Supply the executive with proper records and a staff of men who can assist him in locating and eliminating wastes and inefficiencies; . . . and the "By-Product Department" will pay dividends far in excess of the cost involved.

The Committee on the Elimination of Waste in Industry, appointed by Herbert Hoover, on which committee it was the writer's good fortune to be a member, treated the matter of waste strikingly and exhaustively, the findings justifying the writer's earlier beliefs and predictions.

When you observe that idleness of a preventable nature in three large plants is 30, 40 and 50 per cent respectively; that 50 per cent of the rejections in a plant are due to the workers, when the management felt that 90 per cent were due to material causes; that it takes two workers 27 hours to make a piece that should be done in 9 hours, and was later made in 11 hours; that twice as much time is taken in switching cars than would be necessary if the tracks were rearranged, it begins to be apparent that too many executives and foremen take too much for granted.

This statement is borne out by the conclusion of the Hoover Waste Committee as follows:

> The quantities presented alone amply justify the following statement: over 50 per cent of the responsibility for these wastes can be placed at the door of management, and less than 25 per cent at the door of labor, while the amount chargeable to outside contacts is least of all.

This spells analysis to determine waste, determination of causes, and development of programs for its elimination.

Profit on goods should not be based on total costs but only on labor and overhead costs.

The factor of "relative complexity," or that which makes one kind of effort cost more than another, is not considered to the extent it should be in price-making. Too often "total cost" is used as the basis for adding profit, and this method is both fallacious and distinctly harmful.

Let me illustrate by 3 compilations given in the table below.

It is logical and seems economic to say that a fair rate of return on goods produced should be commensurate with and in proportion to the efforts expended in producing them.

If this conclusion is sound, let me ask this question: Is the effort expended the same in the three cases above mentioned? Analysis does not seem to indicate this. In the "C" case we have *twice* the material cost as in "A" and ⅓ the cost of labor, with overhead varying in the same proportion. Does the material reflect the complexity factor? If you will look at the "C" job as a transformer tank and "A" as a gas engine, it is clear that the net effort expended is not in material.

What is a plant? A place where workers properly supervised, housed, furnished with tools and facilities, and supported by the organization necessary to secure and finance business, can process one kind of material into another, the nature of the work done determining whether *more* or *less* time (therefore cost) is to be put in on this material. This means, then, that material becomes the incidental, of relatively less importance than the labor and overhead, as far as profit-making is concerned.

Why does a worker spend one hour on one job and two hours or twice as much on another? Because of the nature of the work to be performed. Should the profit be the same in both instances? Nature of work should therefore govern rate or amount of return, should it not?

Referring to the figures we find that on the "C" job (the lowest labor) we net $200 in profit or 200 per cent on an expenditure of $100 for labor, while on the "A" job we net $200 on an ex-

Factor	A	B	C
Material	$400	$600	$800
Labor	300	200	100
Overhead at 100 per cent	300	200	100
Total cost	$1000	$1000	$1000
Profit at 20 per cent	200	200	200
Price	$1200	$1200	$1200

penditure of $300 for labor, or 66.6 per cent. Ridiculous, is it not?

Overhead, if a flat rate on all hours or dollars of labor, would not warrant us in including it in our complexity calculations, but in these days of departmental overhead rates and super-rates for machines, overhead *does* enter into our calculations, as it is an investment made necessary to *augment* and *facilitate* the efforts of men and machines.

Material is merely *jobbed.* We buy it, process it, and ship it, the nature of the work, not the *pounds, tons, pieces or feet,* determining how much must be expended for men, machines, and the augmenting and facilitating. What difference does it make to a plate whether 20 holes or 100 holes are punched in it? There is a lot of difference, however, in the time and cost of punching 5 times the work in one case as against the other.

This conclusion therefore seems a proper one—add sufficient profit to material for carrying charges, but secure the greatest profit from the labor and overhead invested in effort expended in processing the material.

Assume, therefore, that we allow 5 per cent profit for material and 50 per cent for the next investment (labor and overhead) and we will have as follows in the table below.

The logic of this axiom will be at once apparent after an analysis of the two sets of figures.

Item	A		B		C	
Material	$400		$600		$800	
Labor	300	600	200	400	100	200
Overhead at 100 per cent	300		200		100	
Total cost	$1000		$1000		$1000	
Material profit at 5 per cent	20		30		40	
Effort profit at 50 per cent	300		200		100	
Price	$1320		$1230		$1140	
Other price	1200		1200		1200	
Difference	$120		$30		$−60	

FOREMANSHIP TRAINING

BY HUGO DIEMER*

UP to very recent years production policies paid very little attention to either the effect on the workers or on the public. The earlier efficiency policies dealt almost wholly with machines—their placement, output, upkeep, and depreciation—and paid very little attention to the upkeep of morale or contentment on the part of the worker. The old-time notion of business or manufacture was that the sole aim was to make profits, particularly for the officials and secondarily for the other investors. We have broadened our policies in recent years to such an extent that the progressive business man of today avows as his policies, fair treatment of the investor, the official, the management, the employee, the customer, and the public.

Production policies will always emphasize as *The* main objects of industrial organization maximum production of the highest quality, at lowest possible cost. But to attain these results industry has found that manpower is just as important as machinepower. No organization can achieve efficiency or economical production unless the employees possess the morale and the loyalty that go with this understanding and the knowledge that they are getting a square deal.

During the war when inspirational speakers were hired to address foremen for the purpose of putting more "pep" into production, these orators told the foreman a good many interesting truths, which he had never before fully realized, such as these:

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The foreman is the connecting link between the management and the workers—the key man, the top-sergeant who reports the policies and orders from the front office and passes them on to the workers under his direction. It is his job to convert plans into product. He must know how to handle men, he must understand the policies of the company and be able to pass them on to his workers in a way that they will understand and accept.

This spiritual oratory attracted the attention of managers and foremen and aroused their interest in ways and means of more fully developing foremen to meet their real responsibilities.

It is agreed that the foreman of today must be a leader and an executive instead of merely a driver. The foreman must get the proper idea of what an executive is. He must be taught how to get results by the use of his men and materials, how to plan, how to use his head instead of his muscle and how to get his men to work willingly and enthusiastically.

The foreman is in a position not only to render services to the proprietorship; but the more intelligently he renders these services, the greater his opportunity is of service to the community and his workers. Aside from his service to his employer when he produces at a minimum cost, he aids in lowering the prevailing prices of commodities, and by aiding the workers to increase their efficiency, helps increase earnings and purchasing power.

The average foreman is apt to be cynical in regard to the actuality of any such possibilities which seem quite Utopian to him. The reasons for this cynicism are easy to find.

1. The management itself has never taken the trouble to show the foreman national statistics on production quantities, prices, wages, and wealth which prove that prices have lowered, production has increased, and wages have risen as we have improved our industrial efficiency. These facts can be proved by government statistics very effectively, especially if we take periods of about 30 years each.

2. Managements have not taken the foremen into their confidence and explained their policies, consequently the average foreman looks on business as an enterprise for profit only and on any expression of public spirited aims by his employers as propaganda only, issued for employee and public consumption.

A knowledge of production policies and methods is but the first starting point of intelligent effective foremanship. The foreman, if he handles his job rightly, must concern himself closely with the men who work with him. One of his chief needs is a knowledge of how to handle men. Industry needs leaders. It wants men who are skilled in handling others. Nobody can attain leadership without paying the price for it. This means that whoever aspires to leadership must be willing to study. We are beginning to realize that leaders are made and not born. The foreman can be made to understand what constitutes leadership and how he can acquire it. He must realize that of all things character in himself and in his men is essential. A plan of training that omits this training for leadership is incomplete and fails to bring success.

II

In addition to training in production policies and methods and fundamentals of leadership the foreman must be taught management principles. Where the foremen have been trained in the principles of management, the results have been an understanding and intelligent discussion of the proposals made by various staff experts.

Too often the foreman promoted from the ranks has become overbearing and arrogant in his treatment of those under him. This results in high labor turnover and lack of morale, and is expensive and distressing to the company. The foreman must be made to see the other side of this problem, namely, his wonderful opportunity to iron out the wrinkles of misunderstanding. If the foreman is cheerful, loyal, and efficient, the men under him naturally and unconsciously tend to become like him. A good foreman realizes that he represents his company. The workmen under him will judge the company's policies by him. He will realize that his leadership is founded on the respect and trust of his men. A foreman who is unfair, a tyrant, or a toady will do more damage to an organization in a day than his influence on speeding up production can undo in a year. The old type of driving foreman is passing—the "rawhides," the "riders." The new type, "the leader of men," will come when the management has decided to train him. Hence a straightforward attitude in dealing with foremen is as essential and as profitable as when applied to relations with customers.

Foremen, like salesmen, must have the ability to gain confidence and goodwill in addition to their more technical abilities. The foreman is a human engineer. As such he must prepare himself for studying to fill the position to which he has been called. Management is almost universally to blame for the fact that it has not itself realized the bigness of the foreman's job and that it has not shown the foreman himself how big his job is. Progressive production managers will voluntarily declare that a campaign to develop

foremen to the full size of their job has made a change through the works that is remarkable.

Conceding that industry's biggest job is to train the workers, the place to begin with training is with the foremen. From them it will naturally reach the workers. One company, speaking of the results of foreman training, says,

> The results in the improvement of foremanship technique were conspicuous. This was particularly true in selling the most important general executive policies of the company to the supervisory force. To use the expression of one foreman: We got the slant of the men who made the policies, and got it so well fixed in our minds that we were able to put it across to the men in our shops.

The outstanding need in industry today is for foremen who not only know what is to be done in their departments and how to do it, but who also know how to convey that knowledge quickly and surely to the workers who are directly responsible for doing a job.

Training departments, no matter how well developed, can never take the training entirely out of the hands of the foremen on the job. Training departments have demonstrated that to get successful results in training employees involves not only methods of quickly acquiring manipulative skill but also of developing co-operation, teamwork, and morale, and that the foreman must begin where the training departments stop.

Foremanship training is a term which has come to be applied to those agencies which attempt to prepare individuals for discharging effectively the responsibilities of the foreman's job as supervisor, manager, and trainer, and to aid individuals already employed as foremen to discharge their supervisory, managerial, and training responsibilities more effectively; also, to familiarize others whose work draws them into contact with foremanship problems, such as storekeepers, tool department heads, timekeepers, schedulers, dispatchers, and others of the non-productive or service staffs. In many instances there have also been included members of the higher supervisory staff coming between the foremen and the general management such as production and planning department men, cost department men, assistant superintendents, and superintendents.

The most outstanding and permanent results have been accomplished where the highest company officials have participated regularly in the program of foremanship training and submitted themselves to the discipline of actually going through the preparation of home work in working out written problems and presenting written reports or answers to assigned questions for discussion. The esteem in which the highest executives are held, the appreciation and loyalty developed are worth many times the sacrifice. On the other hand, if the leading officials do not participate in the training, the group leader frequently gets such comments as, "If the boss could only hear this discussion things would be different here."

III

Most foremen have climbed up from the ranks with very little formal schooling. Such men are apt to be skeptical regarding educational ventures of any kind. Their motto is "Practice makes perfect." They do not as a class realize that whenever they endeavor to find a reason for doing a certain thing—to get the "why" behind it they are searching for theory.

The foreman is usually reluctant to discuss even his most vexing problems with others, especially with higher ups. He dislikes to admit ever having

trouble. According to his way of thinking, this is an admission of weakness. It is hard to get him to talk. He knows he cannot speak glibly. As a result unless the group leader has taken the proper steps to draw him out he remains discreetly silent. He suffers from embarrassment and false pride and often feels it is useless to say anything anyway because the management cannot appreciate the nature of his problems. Unless the leader gets under his skin and establishes a feeling of confidence he cannot get very far. Hence the best results are obtained by assigning discussion questions to individual foremen, and helping them in their advance preparation of the answers and discussions of these questions.

Men of the foreman type whose training has been wholly practical, are usually lacking in ability to analyze their jobs except in the most superficial way. To correct this situation should be one of the first objects of training. The foreman has nothing but utmost contempt for those who are condescending or patronizing; he actually considers they are beneath him and that they should be so treated. Hence the group leader in his talks and discussions, and authors of lessons and problems must studiously avoid any attempts at talking down or introducing illustrations or cases that are too obvious or too simple. Professor MacDonald of Cincinnati, who has had wide experience with foremen's meetings, says:

The dominant characteristics of any group of foremen are likely to be as follows:

1. They have mature minds
2. Are inclined to scoff at theory
3. Have well-established habits
4. Are largely self-made
5. Are self-confident, of the "show me" type
6. Are not usually open-minded
7. Have never carefully analyzed their jobs
8. Are skeptical regarding training courses
9. Think best when antagonized
10. Enjoy discussing their everyday problems
11. Are jealous of authority
12. Have high regard for the square deal
13. May be expected to co-operate well if they have faith in the one in charge of any movement

The foreman is not to be blamed. These shortcomings on his part are but the result of the schooling which industry has given him ever since he entered as a worker. There is something about the atmosphere of the average shop with its commands and orders, its "do as I tell you," and "ask no questions" which breeds autocracy, which dulls the finer sensibilities of both master and man. It is only natural that foremen should acquire a dual personality, that they become a veritable Dr. Jekyll and Mr. Hyde. On the one hand, there is the personality of good fellowship which reveals itself to his family and to his friends; on the other hand, he is the petty tyrant of the shop.

I have seen many foremen who, when they enter a shop, figuratively speaking, put on a mask, and who, during the 8 or 9 hours of their shop life, never drop this mask for a moment. After hours on the athletic grounds, or in the evening at the lodge or on their front porch they resume their natural good fellowship.

The foreman does not want to assume this mask. He does it because he thinks he ought to, because he thinks it is the way the management wants him to act. Under the pressure of his position he acts hastily and directly, often tactlessly and blunderingly as far as human relations are concerned. On the other hand, there is a

great difference between the foremen of one plant and the foremen of another. Those who are familiar with different industrial organizations state that "as the management, so are the foremen, and as the foremen, so are the workers." One man has said, "Let me get acquainted with the foremen and I feel that I am acquainted with the management and also the workers."

If that is true then we will also find that even managers have a dual personality as well as foremen. Usually the Mr. Hyde part of the foreman is nothing but the counterpart of the Mr. Hyde of the management.

IV

It is to be regretted that much of the apparent loyalty of the foreman to the management is only assumed and is a part of the occupational mask mentioned before. In foremanship classes where some representatives of the management sit in with the foremen, it has been found that in answer to the questions or in the point of view taken in the discussion, the foremen talk as they think the management would like to have them talk. Only too often the management gets from the foreman that which the foreman thinks the management would like to hear. It is interesting to mingle with the foremen after they come from a group meeting attended by managing executives. Usually the things which they say going out are different from the things they said when called upon to express their opinions. To one who is acquainted with foremen, it is often pitiful to sit in at their meetings and note the almost tragic attempts of a foreman to voice that opinion which he thinks will please his superiors. The management would have one more problem to worry about if they could hear what the foremen say behind the scenes when they are among themselves. Because of this wide prevalence of lip service and "acted loyalty" the group leader has a real problem requiring diplomatic ability coupled with sincerity and high ideals.

In reality, the foreman's loyalty is to be measured in the way he feels at heart toward the management. If America has been able to succeed so well industrially in the last few years with discontent and disloyalty so prevalent, what could she not do if the foremen had their hearts in their jobs? Psychologists tell us that feelings are a dominant factor in achievement. A works manager who is also a company director said to me:

> I feel that I am not too low when I state that we are only tapping about 5 per cent of foreman power. This is the most inspiring thing that I have to stimulate me in my work with our foremen. It is our job to tap the remaining 95 per cent of lost energy.

As to methods of foremanship training and content matter of the training courses, these two matters are so intimately interwoven that it is best to consider them together.

Mr. Layton S. Hawkins, formerly Assistant Director of Vocational Education of the Federal Board at Washington, and now Educational Director for the United Typothetae describes three methods of training which he designates respectively:

1. The disconnected lecture method
2. The co-ordinated lecture method
3. The conference method.

In the disconnected lecture method we may expect increased general intelligence with regard to the problems of the organization as a whole. If the lectures are of the inspirational type they may produce an inspirational effect provided the men are able to follow the lecturer and thoroughly

grasp the points set forth. But the results are not apt to be lasting.

In the co-ordinated lecture method we have specific objectives, for example, better co-operation between foremen and their superiors or the improvement of the foreman's attitude in dealing with his men. Every subject of the course is carefully planned and the lectures are delivered by individuals who know how to create and maintain interest and who have a natural aptitude for imparting information clearly and concisely. The co-ordinated lecture method may be expected to promote general improvements in the fields covered by the lecturers.

The conference method works through the stimulated self-activity of the members of the group so that they are active, not passive or merely receptive. The conference leader can establish personal relations with members of the group and can vary his method according to the particular make-up of different group members. The conference method can be utilized to give training by use of the case method under it. Pooling of experiences is made possible. The number of individuals competent to conduct conferences is of course limited because they must have had experience in production work and must be carefully trained in methods of conducting groups.

V

The interest caused by a series of lectures has often been accepted as indicating the highest degree of efficiency in foremanship training. Mr. Hawkins thinks that we are beginning to realize that such was not the case and that we need to build more permanently. This permanent building is best accomplished by accompanying the conferences by systematic problem and lesson work carried on by home-study as a preparation for the conferences and discussions.

The program of discussion should be built around men, materials, equipment, and the system. The best teachers are men with broad experience in offices and shops. Generally a man who has a keen desire to teach largely for the love of helping men, makes a good teacher.

It would seem, therefore, that there is a consensus of opinion among the best authorities that a definite co-ordinated plan of the content matter is a first essential of any system of foremanship training, and that the best results are obtained when this content matter is brought home to the foreman in such a way as to develop his thinking and initiative in applying the ideas to his own work and problems.

The foremanship training course can be brought to a foreman in various ways: one way is through individual mail extension work and home study. The foreman who, on his own initiative, takes such an extension course, is, however, not apt to be among those who are in greatest need of foremanship training. Those who are in greatest need of the training can only be reached through the conference or group method.

VI

In the group method we have four distinct kinds of groups:

1. The individual company group with co-ordinated instructional material and a competent group leader.

2. The joint or co-operative group from various companies with a trained group leader. In this plan each company underwrites its members in the group and numbers pro rata the expense of the instructional material and group leader.

3. The individual company group without a trained group leader in which a company member acts as chairman.

4. The Foremen's Club with members

from various companies without a trained group leader but with a chairman selected from one of the company members.

Naturally the first two methods are the most desirable, but where a plant is remote from large population centers, one of the last two methods may be the most expedient if not the most satisfactory or efficient for a given situation.

Fundamentally the instructional material for a foremanship training course should be based on the application of methods of job analysis to the foreman and his job in the plant. With this idea of job analysis as a basic one running all through the course, the material might be divided into four groups as outlined below. The first group deals with the human element in industry, the foreman's responsibility for containing all sorts and conditions of men into a uniformed working conference. The competent foreman must grasp his opportunity to build the team spirit. Before he can do this he must learn what are the qualities, characteristics, intimate desires, and motives of men, how men think and feel and act; the foreman must know how to use this knowledge of human qualities to attain to leadership himself. He must learn how to develop the essential personal qualities for team leadership. This first group should also deal with the subject of training a working force, discussing fundamental principles and methods of teaching and training in the shop.

Experience has shown that it is unwise to begin a course in foremanship training with economics. Managements are apt to be too eager to stress at the outset instruction emphasizing the advantages of our present-day economic organization. Economic matters are therefore purposely deferred to the end of the course, because after the foremen have been in the conference and study work for several months they are in a much better frame of mind and better prepared to discuss economic matters with no suspicion that they are being subjected to capitalistic propaganda.

The second group deals with job analysis with illustrations by cases and problems. The flow of work through a plant, the principles behind all planning and production methods, the effect of the shop conditions in getting out the work, and the qualities of a good production man are studied and discussed.

The third group deals with the foreman as a business man. It discusses his participation and co-operation in stockkeeping and material handling activities, in keeping down production costs and material wastes. It presents the purposes and typical records of central stores, departments, and efficient practice in stock handling, not only in the stockroom but everywhere in the shop. The fundamentals of cost keeping are taken up, the stress being on practice rather than systems. The topics discussed are not of an accounting nature but include such matters as productive and non-productive labor, material and expense, depreciation, predetermined costs, and cost control.

The fourth group discusses foremanship in its relation to economic and social matters. The economic facts and factors on which production and industry are based, the knowledge which it is necessary for any man to possess who would think straight on industrial questions and shop problems. Certain aspects of the law are taken up, with which the foremen should be familiar. Those activities of industrial service which are usually carried on by the personnel department, when there is such a department, but in which under all conditions the foreman must

be a participating factor are taken up in this group.

A competent group leader needs to be trained in:

1. The analysis and classification of what is to be taught.

2. How to get the best result out of discussions—developing broader intelligence.

3. Lesson planning—tying up auxiliary information he gets at each plant with a standard lesson.

4. Getting local production problems into an effective instruction sequence, in co-ordination with the standardized home-study course.

5. Handling a group for effective instruction. Interest and interest factors—instructional conditions as affected by surroundings and materials.

The above is the merest abstract of the content and method of modern foremanship training. It will serve to show how generally we are coming to recognize the importance of the group leader. We must recognize also that in this field as in the teaching field in general a person may have the sincerest desire to be a good group leader, and may take the best of training and still fail. The earnest hard worker who lacks personality and vitality will not fill the bill. Neither will the smart fellow with lots of assurance and effrontery, but without a background of real hard work. The most successful group leader is apt to be a man who has had actual industrial experience either by necessity or by choice and who has advanced to a higher position. A man of good physique with pronounced personality, and who has sufficient humility to study hard the fundamentals applicable to all foremanship training, as well as the peculiar problems of his own situation, is needed. A company employment manager or personnel director is too busy an executive to act as group leader. He may act as chairman of the group, but if he is in the group at all, and he should be, he must himself do every bit of home study and problem work done by the other group members. In fact this punctilious participation by higher executives is an absolute essential of any satisfactory group training plan. Experience at widely different places and with different courses goes to prove that courses that have resulted in 100 per cent completion and marked improvement in morale and production with such participation have failed or been far from satisfactory where this participation by company president, personnel man, works manager, and higher production executives has not been faithfully given.

According to the last published census of manufacturers, 98 per cent of all of our American industrial plants employed less than 250 people, there are 3000 plants employing 250–500 people; 1400 plants employing from 500 to 1000; and only 648 plants employing over 1000 people. The big businesses have come to recognize pretty well the advantages of foremanship training.

It is the realization of the tremendous field of possibilities in the smaller industries that justifies the growth of the movement for foremanship training. We are only at the threshold of this movement. Those who are active in the movement and who have had an opportunity to observe and measure its results feel confident that its ultimate results will be acknowledged as being a factor as important as the scientific management movement or the personnel management movement in bringing about greater industrial efficiency and in maintaining America's industrial supremacy.

PATENT VALUATIONS AS AFFECTED BY FEDERAL TAXATION

BY RALPH H. ALLEN*

AT the present time there are pending in the Treasury Department a great many tax cases, the settlement of which is delayed because of the lack of specific regulations concerning patent valuations.

Since 1836 the United States has issued over 1,300,000 patents. To a considerable extent the prosperity of this country has grown out of the production of articles for the manufacture of which the government has granted for 17 years that monopoly known as a patent. Each year that elapses exhausts one-seventeenth of this monopoly; and it is good accounting to represent this exhaustion by a charge against income, and also a good taxation principle for the government to allow such a deduction in computing taxable income.

Just what amount is proper as a deduction from gross income for patent exhaustion is often a matter of dispute. The case is comparatively simple if the patents were acquired on or after March 1, 1913, as in these circumstances cost is used as the basis for computing annual exhaustion. If, however, the patents were acquired *prior* to March 1, 1913, the taxpayer is obliged to establish their actual value *as at that date.*

The actual value may be entirely different from the value shown by the books. An example of this exists where a taxpayer acquired patents, say, in 1908 at a cost of $170,000, but who, in 1913, found the patents to be worth $467,000. In this case, the taxpayer, provided he can establish the value of $467,000, may charge against income annual depreciation on $467,000 instead of on only $170,000, over the remaining life of the patents.

The principal sections of the law and regulations supporting the foregoing are given below:

Law (1921): Section 214-a-8 (individuals), 237-a-7 (corporations)—That in computing net income there shall be allowed as deductions:..... A reasonable allowance for the exhaustion, wear, and tear of property used in the trade or business, including a reasonable allowance for obsolescence.

In the case of such property acquired before March 1, 1913, this deduction shall be computed upon the basis of its fair market price or value, as of March 1, 1913.

Regulation 62 (Article 167)—In computing depreciation allowance in the case of a patent or copyright, the capital sum to be replaced is the cost (not already deducted as a current expense) of the patent or copyright or its fair market value as of March 1, 1913, if acquired prior thereto. The allowance should be computed by an apportionment of the cost of the patent or copyright or of its fair market value as of March 1, 1913, over the life of the patent or copyright since its grant, or since its acquisition by the taxpayer, or since March 1, 1913, as the case may be. If the patent or copyright was acquired from the

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Author's Note: This article represents the opinions of the writer, after daily contact with the income and profits tax laws, Treasury decisions, regulations, and rulings herein indicated, over the entire period covered. Obviously they are not Treasury Department opinions or decisions except where so stated. It is assumed that the readers of this article are familiar with the general features of accounting and also with the Treasury regulations. The writer is much indebted to Mr. Walter A. Staub, C. P. A., of Lybrand, Ross Bros. and Montgomery, for valuable suggestions embodied in the article.

Government, its cost consists of the various Government fees, cost of drawings, experimental models, attorneys' fees, etc., actually paid. If a corporation purchased a patent and paid for it in stock or securities, its cost is the fair market value of the stock or securities at the time of the purchase. . . .

Depreciation of a patent can be taken on the basis of the fair market value as of March 1, 1913, only when affirmative and satisfactory evidence of such value is offered. Such evidence should whenever practicable be submitted with the return. . . .

The *cost of patents* is the amount which is deemed to represent the actual out-of-pocket cost of the patent to the taxpayer, either in actual cash or its equivalent, as direct purchase price for the patents, or by capitalizing the expense of securing the patent, namely, patent attorneys' fees, drawings, working models, engineering services, experimentation, etc. For invested capital purposes, the total cost is depreciated over the life of the patent, and a deduction made each year so that at the expiration of the patent no part thereof remains in the invested capital of the taxpayer.

In the case of patents acquired for stock there is a limitation in the 1918 and 1921 Revenue Acts as to how much of this patent value can be included in invested capital.

Law: Sec. 326-a—That as used in this title the term "invested capital" for any year means:......

(4) Intangible property bona fide paid in for stock or shares prior to March 3, 1917, in an amount not exceeding (a) the actual cash value of such property at the time paid in, (b) the par value of the stock or shares issued therefor, or (c) in the aggregate 25 per centum of the par value of the total stock or shares of the corporation outstanding on March 3, 1917, whichever is lowest:

(5) Intangible property bona fide paid in for stock or shares on or after March 3, 1917, in an amount not exceeding (a) the actual cash value of such property at the time paid in, (b) the par value of the stock or shares issued therefor, or (c) in the aggregate 25 per centum of the par value of the total stock or shares of the corporation outstanding at the beginning of the taxable year, whichever is lowest: Provided that in no case shall the total amount included under paragraphs (4) and (5) exceed in the aggregate 25 per centum of the par value of the total stock or shares of the corporation outstanding at the beginning of the taxable year.

The limitation on the percentage of capital stock which may be included in invested capital for patents acquired for stock does not appear in the 1917 law. Under that law patents were deemed to be tangible property, and the only limitations were that the amount to be included therefor must not be greater than the actual value at time of acquisition or par of stock issued therefor. (Sec. 207-a-3-a.)

II

It will be observed that for the purpose of determining the *invested capital* of a corporation recourse must be had in some cases to the very early records of a taxpayer in order to obtain actual cost of the patent. An entirely different procedure obtains in connection with the treatment of the patent in computing the *income* of the corporation if the patent was acquired prior to March 1, 1913. Under existing laws and regulations the Treasury Department has no authority to tax income earned prior to March 1, 1913.

To provide the taxpayer with a means whereby a correct start could be made, the government has permitted in certain cases the use of a valuation as at March 1, 1913, on the basis of one or more of the following methods:

1. Bona fide offers to purchase for a stipulated price

Profit and Loss Account 1908–1912 Inclusive[1] (Corporation B)

	Total	I From Patented Articles[1]	II Other Sales[1]	III Other Income
Sales.................	$......	$......	$......	
Cost of Sales..........	......	......	......	
Gross Profit...........	$......	$......	$......	
Other Income.........	......	......[2]	......[2]	$......
Expenses[3]	......	......	......	......
Net Profit............	$......	$......	$......	$......

[1] For the purpose of this article 1908 is assumed to be the date of issue of the patents.
[2] These columns may be subdivided if desired into the company's main products.
[3] Expenses may be subdivided to any extent desired.

2. Appraisal by a competent neutral authority, separately or in conjunetion with the inventor
3. Capitalized earnings applicable to the patents
   - (a) In a corporation whose business is based entirely on patents
   - (b) In a corporation whose business is based partially on patents

Methods 1 and 2 above are self-explanatory. Method 3 needs a certain amount of explanation, in view of variables which exist in connection therewith. The simplest example to use as the basis of this explanation is that of:

(a) Corporation A, whose business is entirely the outgrowth of patents and patent rights: All income received by this corporation is either directly or indirectly the result of the basic patents owned by the corporation. A theoretical short-cut method would be to take the *total net income* of the corporation, capitalize it, and assume that the resulting figures represent patent valuation. Such a method, however, would not be accurate, because of the fact that any active corporation has equities in assets other than patents. These other net assets, consisting of cash, accounts, inventories, plant (less mortgages and other liabilities) would, in the normal course of business, in themselves produce a certain amount of income. The cash could be loaned out, the buildings could be rented, etc. It is not fair, therefore, to take the total income of the whole as representative of the patent valuation. An allowance should first be made for the income attributable to the cash, inventories, and other net tangible assets of the corporation. The balance of the income may then be assumed to represent the income attributable to the patents or intangible assets.

(b) Corporation B, whose business is not entirely the outgrowth of patent rights must find a means whereby its income can be allocated:

1. To patents
2. To the other assets of the business

With this in view some taxpayers will be able to make a profit and loss statement along the lines of the table above, so as to be able to allocate to the patents that portion of income which arises from their use:

The net profit of column I above, capitalized at the proper rate, is indicative of the value of the patents as at March 1, 1913. The method of arriving at the proper rate, and a discussion thereof, are given later.

III

When capitalizing earnings, obviously a sufficiently long period should be used in order to give an accurate view of the earning power. Five

years has been acceptable to the Treasury Department in determining the value of the good-will of a distillery, as indicated in Appeal and Review, Memorandum No. 34, which is quoted in Treasury Bulletin "F" on "Depreciation" (p. 23). If for good and sufficient reasons it is impossible to take the five-year average a shorter period might be acceptable, and conversely, if the taxpayer can establish the fact that a longer period, say 8 or 10 years, is more representative, such claim should certainly be made.

The regulations distinctly state that one of the best criteria for patent valuation is earning power. Other things being equal, the longer the period used the more accurate should be the average as representing the earning power of the patents.

In determining which items should be included or excluded in the computation of earnings for this purpose, usual accounting principles govern. A few observations which are logical and apparent may be helpful:

1. In the case of a corporation having sources of income other than its patents, there should be an elimination for the time being of such other income as explained above.

2. Allowance for depreciation and exhaustion of patents should be eliminated. This is a reasonable elimination, otherwise the earnings would be computed on an exhausted basis. This point is discussed later in this article. (See page 197.)

3. Other extraordinary charges which should usually be added back to the income are:

(a) Good-will, patents, and investments charged off

(b) Experimental and development expense

(c) Such reserves as are really a part of surplus

4. Any other charges which the accountant would, as a rule, eliminate in arriving at the ordinary earnings of a business.

It seems desirable at this juncture to explain the meaning of "Realization of Appreciation," as applied to patents, where March 1, 1913, valuation differs from cost.

A taxpayer who uses the *cost* method of arriving at the value of his patents for invested capital purposes, but who uses the *valuation* method as at March 1, 1913, for arriving at their value for depreciation purposes, will have a different asset value in each case, with a resulting difference in the annual allowance for depreciation. It is quite possible in such cases that the depreciation allowable as a deduction from taxable income may be in excess of the amount to be used in computing invested capital. Therefore, a taxpayer, who reduces his surplus by an amount to cover annual depreciation, based on a large March 1, 1913, valuation of patents, may be reducing his surplus more rapidly than he should for invested capital purposes. Here is a concrete example of this:

It is evident that if the corporation included in its invested capital patents to the extent of actual first cost (in 1908) of \$170,000, the corporation would be obliged to reduce its invested capital \$10,000 per annum for 17 years. If, however, the corporation found by bona fide appraisal and capitalization that its patents were worth \$467,000 as at March 1, 1913, it would be entitled to deduct from gross *income* one-twelfth of this sum (five years of the patent life having expired) or \$38,916.67. Thus the situation arises where one amount of depreciation is deducted for invested capital, and another different amount for income purposes, on the same patents. (See table on page 194.)

Were the sum of \$38,916.67 deducted from the annual surplus of the corporation it is evident that adjustment must be made by adding back to surplus a

Comparison of Patent Exhaustion when Patent Value for Invested Capital Purposes Differs from Patent Value for Depreciation Purposes

Year	Invested Capital		Income	
	Cost of Patents as at March 1, 1908	Annual Depreciation for Invested Capital Purposes	Valuation of Patents at March 1, 1913	Annual Depreciation for Depreciation Purposes
March 1, 1908	$170,000	......	....	....
" 1909	....	$10,000	....	....
" 1910	....	10,000	....	....
" 1911	....	10,000	....	....
" 1912	....	10,000	....	....
" 1913	....	10,000	$467,000	....
" 1914	....	10,000	....	$38,916.67
" 1915	....	10,000	....	38,916.67
" 1916	....	10,000	....	38,916.67
" 1917	....	10,000	....	38,916.67
" 1918	....	10,000	....	38,916.67
" 1919	....	10,000	....	38,916.67
" 1920	....	10,000	....	38,916.67
" 1921	....	10,000	....	38,916.67
" 1922	....	10,000	....	38,916.67
" 1923	....	10,000	....	38,916.67
" 1924	....	10,000	....	38,916.67
" 1925	....	10,000	....	38,916.63
Totals		$170,000		$467,000.00

sum which will result in only $10,000 per annum deduction when computing invested capital. This adding back is called "Realization of Appreciation" in Regulations 62, Article 844. The amount added back to surplus in our example would be $28,916.67 per annum.

IV

The most convenient procedure for determining net tangible assets in corporation A or B is the balance sheet arrangement, which may be so designed as to indicate sub-totals for:

1. Tangible assets
2. Liabilities
3. Intangible assets

The net of 1 and 2 constitutes the net tangible assets, which is the entire net worth with the exception of patent rights, good-will, and other intangibles, under 3. The abbreviated form of balance sheet on page 195 will exemplify this.

Under the excess profits tax law all corporations were assumed to be exempt from excess profits tax up to 8 per cent of their invested capital. It was doubtless recognized by the lawmakers that this figure was at best only an approximation. It is obvious that, even if it were a fair average, this rate would result in injustice to certain classes of corporations. For instance, enterprises which entail a greater

ASSETS

Cash	$000.00		
Accounts and Notes Receivable	000.00		
Inventories	000.00		
Investments	000.00		
Deferred Charges	000.00		
Land	000.00		
Buildings (net of reserve)	000.00		
Equipment (net of reserve)	000.00		
Tangible Assets		$0,000.00	
Patents	$000.00		
Good-will	000.00		
Intangible Assets		$0,000.00	
Total			$000,000.00

LIABILITIES

Accounts and Notes Payable	$000.00		
Accruals	000.00		
Bonds Payable	000.00		
		$0,000.00	
Capital Stock	$000.00		
Surplus	000.00		
Disallowed Reserves	000.00		
		$0,000.00	
Total			$000,000.00

amount of risk than the average business are entitled to a higher percentage of profit. Capital cannot be enticed into hazardous undertakings without the incentive of extraordinary profits. What the equitable rate would be for any particular company depends on the nature of its business. That the rate of return varies for different classes of undertakings is self-evident, and is in fact admitted by the Treasury Department in its administration of the capital stock tax law. In the capital stock tax returns, Form 707, the Treasury permits the taxpayer to insert his own percentage when capitalizing earnings under exhibit "C."

No sane financier would invest his funds in an industrial enterprise, which contains, after all, a considerable element of risk and represents money tied up in a large amount of plant for an indefinite period, if for the same rate of return he could invest his funds in high-grade securities with little risk and a ready market. Industrial enterprises for this reason must of necessity produce, and be entitled to, a higher rate of income than ordinary investments.

In the absence of good reason for using a different rate, there seems to be some justification for using 8 per cent in ordinary, average industrial enterprises, subject to the assaults of competitive business, as representative of the return attributable to *tangible assets*, inasmuch as Bulletin "D," issued by the Treasury Department in 1919, shows that out of 277 subdivisions of industry only 48 earned more than 10 per cent, and only 8 earned 15 per cent or more.

Assuming a corporation with average

annual total net earnings of $150,000, and tangible assets, as shown by its balance sheet, of $1,000,000:

Eight per cent return on the tangibles ($1,000,000) would give $80,000.

The total annual earnings having been $150,000 (from both tangibles and intangibles), there remains $70,000 attributable to intangibles.

The next step is to capitalize the $70,000 at some rate which will result in an equitable valuation.

In the distillery case cited above (A. R. M. 34) 20 per cent was used in arriving at a valuation for good-will. This is interesting because of its bearing on what percentage should be used for patents. This rate was intended to apply particularly to businesses put out of existence by the prohibition law, but will be equally applicable to other businesses of a more or less hazardous nature. The extent of hazard governs the rate. In this sense 20 per cent may be deemed to represent more or less the maximum, a much lower rate probably representing the average.

We will assume that the intangibles in our example are patents. Carrying out the example of 8 per cent earnings on $1,000,000 tangible assets, resulting in $80,000, we are left with $70,000 earnings attributable to intangibles. Capitalizing this, at, say, 15 per cent, which may be considered a fair rate in average cases, we arrive at a capitalized value of $467,000 for the intangibles.

In tabulated form the statement would appear as follows:

Capital		Earnings
	Total average annual earnings for..... years as per exhibit............	$150,000
$1,000,000	Tangible assets, at 8 per cent.......	80,000
	Balance attributable to patents.......	$ 70,000
$467,000	Balance ($70,000) capitalized at 15 per cent, being the value of patents as at March 1, 1913.	

In this example the total capital as constructed amounts to $1,467,000, and the total earnings to $150,000. This indicates average earnings of about 10 per cent on capital.

The Treasury Department Bulletin "D" indicates that the great majority of corporations, in normal times, earn less than 10 per cent on their invested capital. The final calculation used in arriving at this 10 per cent affords an excellent check on the reasonableness of the figures used. The Treasury Department analyses indicate that the average percentage of pre-war income to pre-war capital of textile machinery industries was 10.42. If the corporation in the above example were in textile machinery business, and endeavored to establish patent valuation on the above plan, it could be shown that the net result when using $467,000 for patent valuation merely produced a percentage of earnings on capital comparable to the textile machinery industry as a whole, according to Treasury Department statistics.

The idea of comparing a corporation with others in a similar line of business is excellent, where difference in products, organization, and size are not too great. But, if these three factors vary greatly, a specific textile machinery corporation might be warranted in using an average rate of only 8 per cent instead of 10 per cent as above indicated.

V

Individual valuation of each patent may be required in order that correct annual depreciation may be deducted. It is conceivable that the most valuable of all the patents may have been the earlier ones, in connection with which large depreciation deductions would already have been required, leaving for the later high tax years the smaller deductions for exhaustion of

the newer patents. For this reason the exhaustion of patents on an *en bloc* basis would in some cases produce inaccurate results.

Reference must be made to the letters patent and any incidental history surrounding the patents in order that a fair, just, and equitable portion of the aggregate value of all the patents may be allocated or apportioned to each individual patent. A patent in itself may have small value, but when associated with others may form an important part in a very valuable combination. A patent under which no manufacturing can be done may serve a valuable purpose in preventing competition. Conditions existing as at March 1, 1913, were very different from those at the present time.

An agreement reached by co-operation of the patent attorney and the manager, or the engineer, or others familiar with the product or process covered by the patent, if duly substantiated by affidavit, would greatly assist the Treasury Department in arriving at a decision in the premises.

Not one alone, but all the following factors may be considered in arriving at individual patent values:

1. Is the patent basic in the industry?
2. Has it been adjudicated and sustained?
3. Will the progress of the art probably render the patent obsolete in a short time?
4. Have royalties been received?
5. Is it interlocked with other patents, and to what extent is it dependent upon them for its value?
6. Is it valuable only because it prevents competition?
7. What total value for all the patents is fair and reasonable, based on the law, Treasury Department regulations, decisions and rulings, through capitalization of earnings?
8. What earnings have resulted from the several patents?

In a corporation having many interrelated patents the last question may appear to present a difficult problem. A means of solving it is suggested below:

The entire group of patents in question is separated as to products. Reference may then be made to the sales analysis to ascertain what percentage of sales to total sales there has been of each product in dollars. Sales are an indication of the regard of the public for the product. Sales would seem to be a better basis at this point than profits, in view of the many business vicissitudes, internal arrangements, possible mismanagement, bookkeeping adjustments, etc., which might distort an otherwise true apportionment of departmental profits.

If the sales of product No. 1 have, over a reasonable period, averaged 20 per cent of the total sales, 20 per cent of the total patent valuation may (so far as factor 8 is concerned) be allocated to the patents assignable to product No. 1, and so proportionately with respect to all the patents.

Ordinarily, the allocation of the total patent value to separate patents is not susceptible of determination with mathematical exactness. The individual patent values will represent the best judgment or opinion resulting from a careful consideration of the various factors involved, to which reference has been made.

VI

Patent applications may exist in that form for several years before finally going to patent. In the meantime products are manufactured and sales are made, or the patent application may be sold. Undoubtedly it has a value in the same sense that a patent has a value, except that there is no certainty until the patent is at last

granted that the application may not be rejected. Looking backward, as the taxpayer and the government now do, it is possible to ascertain quite definitely whether or not an application existing on March 1, 1913, has been rejected.

As to those which subsequently went to patent, the question arises: When does depreciation begin — at the date of the application or at the date of the patent?

Regulation 62 (Article 167) says that the allowance for depreciation of patents "should be computed by an apportionment of the cost of the patent or copyright or of its fair market value as of March 1, 1913, over the life of the patent or copyright *since its grant*."

If, therefore, a taxpayer establishes a value as at March 1, 1913, on a mixture of both patents and applications, depreciation does not begin on the applications until the same have gone to patent.

This is a reasonable provision, inasmuch as it would be possible to depreciate applications properly only when looking *backward* as a matter of history, it being impossible to tell in advance when, if at all, a certain application may become a patent.

The next question involved is: What amount should be used to determine the value of the applications acquired prior to March 1, 1913, when apportioning as at March 1, 1913, the total value of the mixed aggregate of patents and applications? It is clear from A. R. R. 328[1] that the applications may be given a value as at March 1, 1913, irrespective of cost. In that ruling the statement is made: "It is the judgment of the Committee that the value of the embryo patents—that is the patentable ideas and formulas—should be treated as patents already secured."

[1] Cumulative Bulletin No. 3, p. 343.

For example: Assume a patent application costing $10,000 in 1908, having a fair value of $20,000 in 1913, going to patent in 1916. No depreciation is deductible for income and profits tax purposes for 1913, 1914, and 1915, the sum of $20,000 remaining as an undiminished asset for those years. In 1916 depreciation begins.

A further question that logically occurs is, whether net income used as a basis for arriving at patent value should be the net income before or after deducting the annual depreciation of the patents.

A. R. M. 34 (previously quoted) deals with *good-will*. Good-will is not considered by the Treasury Department to be subject to ordinary depreciation, and it is therefore treated for income tax purposes as being what might be called an undiminishing asset.

Patents, on the other hand, have only a limited life. Provision is therefore to be made for the exhaustion or extinction of a portion of their expired life each year. Because of this difference some distinction might properly be made in the method of capitalization of good-will and patents respectively.

In applying A. R. M. 34 to patent cases, either of the following methods will suggest themselves:

1. The net income *before* deducting patent depreciation may be used in arriving at patent values. In the preceding sections of this article this plan is the one that has been followed. No annual exhaustion feature inheres in good-will; so no annual exhaustion is figured in capitalization of patents. Thus the procedure may be made the same for both.

2. The net income *after* deducting patent depreciation may be taken. It then follows that different rates (other than 8 and 15 per cent, should be used, in view of the fact that an investor could not expect as high a rate of return when one-seventeenth of the principal is returned to

him each year (patents) as he would be when the return of the principal is indefinitely postponed (good-will). In these circumstances a percentage lower than 15 would be more equitable to the parties concerned.

Assuming *10 per cent* as the basis of capitalizing patent values, and using net income *after* deducting patent depreciation, the following table would result:

Capital			Earnings
	Average annual earnings for........years as per exhibit...... before deducting patent depreciation............	$150,000	
	Less, patent depreciation........................	10,000	
	Net average annual earnings after deducting patent depreciation:		$140,000
$1,000,000	Average tangible assets, at 8 per cent........................		80,000
	Balance attributable to patents........................		$60,000
$600,000	Balance ($60,000) capitalized at 10 per cent, being the value of patents as at March 1, 1913 (patent depreciation having first been deducted)		

The *annuity* basis of arriving at patent value generally results more favorably to the taxpayer. It is a question whether, after all, it is not more equitable than using A. R. M. 34 as a basis for valuing patents.

In this article, it is assumed that the corporation will receive an annual income attributable to patents of $70,000 for twelve years (the unexpired life). Such income, as an annuity, results in the following "present worths" at March 1, 1913.[2]

At	4 Per cent	$656,955
"	6 "	586,869
"	8 "	527,525
"	10 "	476,958
"	12 "	433,605
"	15 "	379,443

At March 1, 1913, because of low interest rates, a reasonable annuity rate would have been 4 per cent. If we use the rate of 6 per cent for an annuity in 1913, on the theory that a larger rate is justified because of the patents involved, we arrive at $586,869 as the March 1, 1913, value of the patents. Any rate higher than this is questionable.

The annuity method clearly indicates that the government ordinarily has much to gain by using the 8 per cent and 15 per cent rates (previously explained) as fair rates of return on tangibles and intangibles, respectively.

A comparison of the annuity and other methods mentioned in this article is given in the example below:

Valuation of Patents as at March 1, 1913, Using Average Annual Capitalized Earnings Attributable to Patents as a Basis

1. Before deducting patent depreciation from earnings: Allowing 8 per cent return on tangibles and 15 per cent on patents....$467,000.00
2. Annuity Method (6 per cent).................. 586,869.00
3. After deducting from earnings patent depreciation: 8 per cent return on tangibles, 10 per cent return on patents — 600,000.00

It will be seen that the first method above, which conforms most closely to A. R. M. 34, results in a lower patent value as at March 1, 1913, than either of the two other methods considered.

[2] An annuity provides for the return of a portion of the principal each year. It is therefore correct to use as a basis, in this article, earnings before deducting for patent exhaustion. To deduct patent depreciation from the earnings to be capitalized, when using the annuity method of capitalization, would in effect result in a double provision for, or deduction of, depreciation, i.e., exhaustion, of patents.

THE LABOR MARKET—A GLANCE AHEAD

BY WM. LEAVITT STODDARD*

FOR the last several months the labor market has been distinctly an "employers' market," that is to say, rather a buyers' market. This has not meant necessarily that labor has been cheap, but that the advantage in the wage-bargain, and hence the main advantage of all, has been on the side of the employer rather than on the side of the employee. This period has been in sharp and obvious contrast to the war-time period that was characterized by labor shortage, high wages, and intensive bidding of employers against each other for workmen. It is in the nature of human situations not to endure. The period in which labor had the "upper hand" is past. What interests us now is to speculate as to the immediate future—is the labor market to remain a buyers' market or is it likely in the near future that the pendulum will swing in the opposite direction and bring us back to where we were a few short years ago?

We have been passing through a period of widespread unemployment which, we are informed by the Secretary of Labor, is now practically at an end. Whether this statement be a literal fact or mere optimism, it is nevertheless evident that unemployment has greatly decreased and that the signs indicate a gradual return to what, for want of a better term, we call "normal" times. But the effects of this period of unemployment on the labor market are bound to last for some months beyond its end, marked finally by a complete resumption of employment. Many thousands of workers have been out of work for from six to twelve months. Their savings have been exhausted; their morale presumably weakened. Is it or is it not true that those who have regained jobs will tenaciously hold them? Will not the sum total effect on the labor market be that labor will show itself ready to hire out for moderate-going wages and be less rambunctious than it was in 1918, 1919, and 1920?

Painfully gathered statistics alone will reveal the date of the termination of the period of labor or wage liquidation. We now know that wages were at their peak in the summer of 1920, and we are also aware that they have been declining in every industry. If wages are really on a progressive downward grade, the bottom of that grade will be a definite point in the labor market. Of course, it may be that wages have already reached a more or less fixed level and that no further changes are to be expected. But it must not be forgotten that as a general principle we can assume that wages rise after a price rise and fall after the fall in prices. Much, therefore, depends on whether we conclude that prices are still falling or not. If we are in for a long period of declining prices, it is a natural deduction that wages will also continue downward. In fact, this is the general belief in many supposedly well-informed quarters. Such a belief, while apparently reasonable, is, in the writer's opinion, erroneous, or at least subject to important modifications, and in the following paragraphs this thesis will be set forth.

In the first place we have to consider an entirely new kind of labor market. Prior to 1915 we had unlimited immi-

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gration, which, translated into plain language, meant that Europe supplied us with workers practically as we needed them plus a considerable overflow due to the prosperity of the country, skilfully advertised abroad. Our labor market—any labor market—may be compared to a reservoir, constantly being drained and constantly being replenished. The major drains come from death, old age, and the growth of industry (including agriculture). The only sources of supply are the natural increase in population, immigration, and changes in industry which throw numbers of men permanently out of employment in that particular kind of work.

From the beginning of the century till the Great War, immigration averaged in the neighborhood of 1,000,000 annually. From the beginning of 1915 to the end of 1919, the total number of aliens admitted was approximately 1,000,000, or what in the 15 previous years had been one year's supply. Had immigration continued during these years at the new normal rate set at the beginning of the century instead of at a lower rate, the population in 1920 would have been 4,000,000 larger than it actually was. And when it is considered that the vast majority of immigrants are workingmen and women, it will be realized that the reduction in the man-power of the nation due to this curtailment has been very great. (In 1913, for example, out of a total of 1,197,000 immigrants, only 148,000 were under 14 years of age. Few were too old to work. Most were in the prime of life.)

Moreover, the loss of 4,000,000 during the last decade is a permanent loss to the nation's labor supply and its effects are bound to be felt for a long time. In brief, the labor market today is poorer by reason of this shortage; there is not the reserve which would have existed despite unemployment and which today would be tending to still further depress wages.

In the second place we must realize that the depression of the past two years or so has also left lasting effects. I have referred to its supposed effect on the morale of workmen. But it has also had an effect, possibly still more significant, on management. Within the past twelve months, particularly, economy has been a watchword with industrial management as never before—at least in recent years. Cost-cutting devices and plans, labor-saving methods and machines, all kinds of reductions in both overhead and operating expenses are the order of the day. There is the strong possibility that for a long period after the present unemployment is largely past, there will be chronic unemployment due to a combination of increased labor efficiency and increased management efficiency. There has been a weeding out of ineffectives all along the line. There have been, at the same time, little or no new enterprises to take up those thus weeded out. To this there are rare exceptions, as in Akron, where, at the height of the tire season and, later in Detroit, the demand for labor seemed like war-times again. But in general it is true that the labor reserve has been swollen by many tens if not hundreds of thousands who will be idle and who will therefore tend to depress wages until more than normal resumption takes place.

Against all this we must place the limitation on immigration by the war and by the post-war legislation.

There is a further important consideration. Theoretically labor is subdued by an industrial depression and will be starved into taking work at lower wages, if starvation is necessary as an argument. But does this theory hold good today? In the face of great

unemployment we have witnessed a series of gigantic strikes against wage reductions in, for one example, the building trades. The New England textile workers who went out rather than accept an additional reduction in rates have evidenced no submissive spirit. The same can be said of the bituminous coal miners whose working year in 1921 was very lean, but who struck rather than lose the rates that their bargaining had gained the year before.

Observation throughout many of the eastern industrial states during the past winter has convinced me that this attitude is general and I am inclined to the belief that until the cost of living is appreciably lower, further wage reductions will be practically impossible and unwarranted. Labor, both individually and collectively, has shown that neither the presence of a large number of unemployed nor anything else will induce it to sacrifice without a last-ditch fight the higher standards which it has won in recent years. In other words, it begins to look as if the unrest and blind strivings of labor about which the world speculated furiously two and three years ago, had finally crystallized into a determination not to fall back to the less advantageous position which it occupied before the war. There has been, in short, a noticeable reaction to liquidation; a reaction that is expressed not just in talk, but in action.

We may investigate and discuss the numerical size of the labor market till doomsday, but if we forget to realize the intangible but still very real changes in temper and spirit, we cannot form a true estimate of the situation. It is well worth while to glance through representative trade union publications, such as *The American Federationist* or *The Journal of the Typographers' Union* to see what labor is reading and what, therefore, labor is to a certain extent thinking about. Such perusal will reinforce the observations made above and will convince the investigator that the world of labor today, to use a rather large and indefinite phrase, is a somewhat different world from that of yesterday. I do not know whether it is better or worse. It is different. All the advanced industrial relations work of the last three years has been of inestimable value, but it has not scratched the surface of the fundamental situation. The war was a great unsettler. The depression has been a provoker of unrest which we should consider on a par with the war.

The mere fact of a considerable degree of unrest in a period of unemployment is contrary to old theories. It is a fact not lightly to be dismissed.

What, then, will be the character of the labor market of the immediate future? For the reasons just outlined, I would conclude, first, that it will *not* be as much of an employers' market as the war-time labor market was an employees' market; and, second, that it will be still less an employers' market because of the intangible attitude of stubbornness which I find exists to a very large degree. Perhaps for these reasons it will be a fairer market all around, for the merits of a case are never fully brought out when one side is much stronger than the other. Indeed, if I am correct in my analysis, the labor market of tomorrow will be more nearly a normal market than any that we have had in the last 10 years. It will be a market in which both parties must use their best wits, in which sharp bargains will be driven, and one in which the public's interests should be far better protected than in a market where either employer alone or labor alone dictated conditions.

CONSTRUCTIVE ACCOUNTING

BY J. S. M. GOODLOE*

"GENERALLY, accountancy may be described as being the science by means of which all operations, as far as they are capable of being shown in figures, are accurately recorded and their results ascertained and stated."

The duties of an accountant include the design and control of systems of account required for recording the transactions of trade, commerce, and finance.

Bearing in mind the definition of the two words forming our text, constructive accounting may be summarized as the creation or making of a synthetic record of the operations and financial transactions of a business. By "synthetic record" is meant a grouping or bringing together of the several parts or sections, each composed of the integral parts or units on which the entire fabric is to be based.

Such records must, according to present-day requirements, be so built that each and every account shall be readily susceptible of analysis into the component parts, just as any physical product may, by chemical analysis, be resolved into its constituent elements.

Modern accounting demands the maximum of efficiency in all departments of a business at the lowest cost consistent with proper and accurate results. This theory applies with equal force to the department charged with recording the numerous business transactions, stating the financial condition and results, as well as to the departments of production, distribution, realization, and finance.

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It is not the purpose to deal here with the accounts of any particular line of industry, but rather with those fundamental principles on which are based the construction of accounts for every kind of business.

The construction of a modern building involves the conversion of raw material—such as brick, cement, lumber, and other essential building material—by the labor and service of employees, contractors, and officers, into a completed structure, ready for its ultimate uses. Constructive accounting creates the final balance sheet, income, or profit and loss statement, and other necessary financial statements by synthesis of original units represented by "vouchers" or single items stating each individual transaction.

The term "voucher" is used in this connection in the broad sense of its definition as given in the "Encyclopaedia Britannica" "to vouch, to warrant, answer for, evidence, any document in writing which confirms the truth of accounts or established facts—more particularly a receipt or other evidence in writing which establishes the fact of the payment of money." According to the "Century Dictionary," that "which gives attestation, evidence, or confirmation of a fact."

In the construction of a brick building, many different kinds of brick may be required, and in constructive accounting, there are many kinds of vouchers by and with which the whole fabric of the records is created.

In the mind of the layman, a voucher is usually associated with an acknowledgment of the payment of money.

This is largely due to the poverty of our language which makes little or no distinction as between vouchers of many kinds.

The principal kinds of vouchers, their functions, and (for the purpose of this article) terminology, may be summarized as follows:

1. Collection Warrant. Evidence of the receipt (or collection) of an exact amount in money from a stated source.

2. Pay Warrant. Evidence of the payment of an exact amount in money to a specific person or persons for specific items.

3. Collection Voucher. Invoice or bill creating an asset—being a charge for merchandise, services, or property, to be collected in money or kind at the present or a future time.

4. Credit Memo. Representing deduction from "collection vouchers" for discounts, abatement or correction of items previously billed.

5. Pay Voucher. Creating the liability for merchandise, material, or other property purchased, expenses incurred, the distribution of income or the restatement of liabilities previously created, and authorizing payment thereof at the present or some future date.

6. Debit Memo. Representing deductions from "pay voucher" for corrections, abatements, discounts, etc.

7. Pay-Roll Voucher or Time Report. Creating liability for wages of employees (including officers and executives) for services and labor, payable at a date, either immediate or future.

8. Material Voucher. Representing the issue or disposition of a definite quantity and value of material, merchandise, etc., for a stated purpose.

Under this term would be included what may be called "production vouchers" recording the creation of manufactures or partly manufactured products from raw material.

Material vouchers may be used, not only to record consumption or application of material or merchandise, but transfers between submaterial accounts and transfers as between various stores or depots.

9. Journal Voucher. Showing in detail the numerous entries not otherwise provided for. Such entries would include:

1. The creation or application of accrued assets and liabilities
2. Entries to establish or record the initial transactions relating to organization, capital, etc.
3. Transfers as between various ledger accounts other than those covered by specifically named vouchers
4. Entries recording depreciation, reserve, or contingent funds and similar accounts
5. Entries closing revenue and expense accounts into income, profit and loss, etc., at end of stated fiscal periods
6. In fact, any and all entries which may be of such small volume numerically as to make unnecessary a special form and grouping of vouchers of initial entry

II

The initial units of building construction (such as brick, cement, lumber, etc.) are inspected and approved before being used, so that the completed building may not collapse, but endure. Even so it is essential that the items or units which go to make up the completed structure of the accounts must be so rigidly inspected and approved that the final results shall be accurate and safe for the protection of invested capital and produce the best possible results; just as the building shall be safe for protection of life and property and yet produce its maximum efficiency.

With the initial units represented by the various kinds of vouchers provided for as indicated above, the next step in our accounting procedure is to so tabulate or record them as to create the accounting structure.

There are two ways of keeping books of account, viz., "single entry" and "double entry." "Single entry" pro-

vides for the debit or credit to asset and liability accounts, but without compensating entries to accounts representing losses or gains of the business. By single entry, the net worth or indebtedness is determined by deducting the known or recorded liabilities from the known or recorded assets, the balance being net worth representing invested capital and surplus (if any); or per contra, the net indebtedness if the liabilities exceed the assets.

The "double entry" plan requires a definite debit or charge to a specific account by contra credit in an exact equal amount. The result of "double entry" is a perfect equation, and in addition to providing valuable data as to revenues, expenses, and other profit and loss accounts, makes possible an exact balance for the verification of the mathematical accuracy of the ledger balances.

The "single entry" system is practically obsolete in so far as modern accounting practice is concerned, and it has no place in the scheme of "constructive accounting."

In considering the proper form or method of recording the several kinds of "vouchers" heretofore referred to, the "double entry" system is used.

All books of original entry are journals, but as there are many kinds of entries or vouchers, so, also, there are a corresponding number of journals. In order that the synthetic arrangement may be preserved, it is of importance that units or entries of similar origin and import be grouped. This may be done either in book form or by separate sheets or lists, which are subsequently bound or filed (so as to be readily accessible for future reference) in such manner as may be best adapted to the requirements of the specific business to be handled.

These journals should be so ruled as to provide for a sufficient number of columns readily to permit the segregation or grouping of those accounts consisting of the largest number of individual entries. Such a plan increases the efficiency by reducing the volume of clerical work and promotes accuracy by reduction in the number of items to be posted to the ledgers. The several kinds of "Journal" may be summarized as cash or sundry records.

The cash Journals are as follows:

1. Cash received (treasurer). To record all cash receipts or collections by the treasurer (or principal financial officer). This record should show the source, nature, and amount of each collection, in what bank account the same was deposited, or other disposition.

Current cash receipts may be generally classified under one of the following captions:

(a) From capital. Being the payment into the business of the capital contributed by stockholders or partners, to be used in conducting the business.

(b) From the realization of assets. Being the moneys paid in liquidation of debtors' accounts previously created (through journal records) by sale of merchandise or other property, or the conversion of other assets into cash.

(c) From borrowed money. Such as the proceeds of notes payable, temporary loans or deposits, etc.

2. Cash disbursements (treasurer). To record all cash disbursements or payments by the treasurer (or principal financial officer). This record should show to whom, for what, and amount of each disbursement, and from what bank or fund paid.

Disbursements may be generally classified under one of the following captions:

(a) The discharge or liquidation of liabilities previously created.

(b) Payments to agents, officers, or employees as working funds or advances to be subsequently accounted for.

(c) Distribution to stockholders or

partners of surplus profits or the return of invested capital.

As a fundamental principle, all cash receipts represent the realization of assets, as disbursements represent the discharge of liabilities. The ramifications of the present-day business, however, impose other items or accounts on the cash account of the general nature hereinbefore indicated.

3. Cash receipts and disbursements by agents or disbursing officers. This record should record the moneys received and paid by such agents, officers, or employees, other than the treasurer, as receive or disburse funds. It should also show the amount, nature, and source of each item or to whom paid, the name of the person receiving or paying the same and should be based on periodical reports or statements, substantiated by proper vouchers.

Such accounts are to all intents and purposes similar to the treasurer's cash records, but are kept independently so that the exact responsibility therefor may always be known and also that the net available balance of cash in the hands of or under the control of the treasurer as chief fiduciary officer may be stated.

III

The preceding paragraphs cover the accounts handled through the cash record, which is merely one form of journal. Other transactions involving the creation of assets or liabilities or transfers as between sundry accounts should be segregated according to their nature and recorded in one or more journals as may, by the nature and volume of the business, be required. The nature of such "classified" journals, or sections of the one general journal, are indicated by the following captions:

Sales Journal (for merchandise or service sold).

Credit Memo. on Sales (discounts, corrections, abatements, etc.).

Sundry Bill Register (for charges other than for merchandise sales).

Credit Memo. on Sundry Bills (corrections, abatements, etc.).

Voucher Record (for purchases, expenses incurred, etc.).

Debit Memo. on Vouchers (discounts, corrections, abatements, etc.).

Pay-Roll Register (for wages and salaries).

Material Record (stores issued, converted, or otherwise disposed of).

Sundry Journal—Accruals of assets or liabilities.

Sundry Journal—Depreciation and reserve accounts.

Sundry Journal—Transfers and miscellaneous entries.

Sundry Journal—Closing accounts at end of fiscal period.

In many lines of business, all of the records or classified journals above referred to might not be required, while in others, some records may be necessary which are not here named. The underlying principle would, however, be the same as that indicated, viz., the grouping of any class of entries which is of sufficient volume to warrant such grouping.

The next step is the posting of the various accounts from the books of original entry (cash and journals) to the general ledger.

The general ledger should in the main be a record of controlling accounts with subsidiary ledgers to show the details or analysis of subordinate accounts.

After all accounts are posted to the general ledger for a given period, comes the "Trial Balance." This is a statement drawn from the ledger which shows the net balance at debit or credit of every account. If the ledger has been correctly posted, the total debits and credits will of course be in accord.

The trial balance is then classified as between:

1. Assets and liabilities entering into the balance sheet, showing the financial condition.

2. Income and profit and loss statements, showing the results of operation, charges against net income, and resultant surplus or deficit—contra to net assets or liabilities.

It is impossible to state in definite and specific terms, accounts or captions entering into the balance sheet, income statement, etc., which would apply with equal force to every line of business, or even to different plants of somewhat similar industries.

As a means of illustration, and speaking in generic terms, the principal accounts which should appear on the balance sheet of a manufacturing company may be stated as follows:

Assets:
- Cash
- Due from Agents and Disbursing Officers
- Accounts Receivable—Customers
- Accounts Receivable—Officers, employees and shareholders
- Accounts Receivable—Sundry accounts
- Notes Receivable (classified in the same way as accounts receivable)
- Prepaid Insurance, Interest, and Expenses
- Merchandise and Material, viz.:
  - Raw Material
  - In Process of Manufacture
  - Finished Product
  - Supplies (such as fuel, repair parts, etc.)
- Funds, Securities or Investments contra to reserves
- Real Estate and Buildings
- Plant and Equipment
- Investment (in securities held for control)
- Other Investments

Liabilities:
- Pay-Rolls—Salaries and wages due or accrued
- Accounts Payable
- Notes Payable (segregated as those issued for borrowed money, material or expenses, officers, employees, etc., and sundry)
- Notes Receivable Discounted
- Accrued Interest, Expenses, Taxes, etc.
- Reserves for Depreciation or Replacement
- Reserves for Losses or Protection of Current Assets
- Mortgage Debt
- Capital
- Surplus

IV

The several statements showing the revenues, cost, and expenses of operation, deductions from profits and resultant surplus (or deficit) would include (in proper sequence according to the nature of the business), appropriate accounts stating date approximately as follows:

Credits:
- Revenue—Merchandise sold, etc.
- Income from Investments
- Miscellaneous Income (such as rentals, purchase discounts, interest income, etc.)

Debits:
- Cost of Merchandise Sold (or direct expense incurred in production of revenue)
- Expense of Selling Merchandise
- General or Administration Expense
- Insurance, Taxes, and Interest
- Losses from Bad Debts or Shrinkage in Assets
- Depreciation
- Dividends (or distribution of profits to stockholders or partners)

The accounts as stated above represent summaries or totals only. Such items should be supported by statements showing in detail not only the "consist" or specific items therein included, but the source or origin.

We have heretofore considered in general terms the initial units or vouchers, the synthetic grouping of these units into properly classified books or records of entry, and the further synthesis of such books into the ledger.

The ultimate result may therefore be stated as:

1. Ledger accounts representing the control of the principal divisions or departments of the business.

2. With subsidiary ledgers or analyses of all the accounts which by their composite nature make such subordinate records either essential or desirable.

3. All ledger entries based on properly classified journals or records, each of which shows the numerous transactions relating to its special province.

4. The journal items showing in detail original specific transactions represented by original vouchers.

There are, of course, in many instances certain intermediate records, the results of which "at rest" are brought into the complete accounts, but such intermediate records are but special kinds of vouchers, journals, or ledgers and, according to their use, must be so considered. Some of the records may be, and frequently are, so designed as to serve in a dual capacity both as journal and ledger.

Reference has heretofore been made to the "analysis" of certain accounts. If the accounts and records have been built on constructive or synthetic bases, the question of analysis is comparatively simple. In general, the analysis of accounts may be divided into two parts, viz:

1. Showing the source or origin of all charges (or debits) and credits to each account during any given period. This may be further amplified by statement showing "contra" accounts charged or credited on all direct entries.

Such analyses would show name or title of accounts and total amounts charged or credited each account from each of the sources enumerated below, as well as the total debits and credits from all sources, viz.:

Cash Received
Cash Disbursements
Collections (by agents and disbursing officers)
Disbursements (by agents and disbursing officers)
Sales Journal or Collection Record
Credit Memo. (applicable to items included in above record)
Voucher Register
Debit Memo. on Vouchers
Pay-rolls
Material Record
Sundry Journal—Accrual of assets and liabilities
Sundry Journal—Depreciation and reserves
Sundry Journal—Miscellaneous entries not otherwise specified
Sundry Journal—Closing revenue and expenditure accounts at end of any stated fiscal period.

Such statement in tabulated form, showing all ledger accounts and the source and volume of debits and credits to each and in total would convey to any person a fairly comprehensive view of the scope, extent, condition, and operation of the enterprise or business, subject, however, to essential data relative to the items included in *net* balances, as here stated:

2. Analysis of resultant *net* balances, such analyses showing the "consist" or items included in such balances.

For instance, such analysis of "Cash" would show the location of all items, whether in bank, and what bank or banks; in transit, in petty cash funds, etc. Such statements might also well show when and how verified. Accounts receivable "balance analysis" would show from whom due, amount and maturity of the several items, with proper notation as to doubtful or past due accounts (if any) and segregation of amounts due for merchandise sold, services rendered, etc., and particularly segregated as to amounts advanced to or due from shareholders, officers, or employees, and the reasons therefor.

"Balance analysis" of invested or capital assets should show the specific

nature of such investments, whether or not used in direct operation of the business, etc., and by corresponding analysis of gross and net revenue, determine to what extent the net income might be further increased by the use of additional capital; also whether the property is producing a reasonable return on the investment.

V

If the accounts be created on constructive or synthetic basis, the matter of analysis is a logical sequence. Each and every ledger account represents the grouping, through intermediate records of original lists of specific items. From such units, any desired information as to origin, contents, detailed costs, etc., may be readily prepared in statistical form.

A material advantage not previously referred to is, that whether the business be large or small, the routine work may be simplified and specific parts of the "construction" of the accounting records delegated in a large business to proper branches or subdepartments, or in a smaller one, to clerks, leaving the executive head of the accounting department with more time for review and consideration of results. Another very important consideration is that the work may be more evenly distributed throughout the month and facilitate the completion of financial statements at close of fiscal period.

As compared with the older and perhaps more generally used plan of a single journal for the entry of all accounts, regardless of their nature, without regard to proper segregation, and without consideration of chronological sequence or specific entry voucher, the "constructive" plan has many advantages. The principal advantage is that every account or every transaction may be traced back at any time to its original source and the authority and responsibility therefor be definitely determined.

The creation of constructive accounts has been compared with the construction of a building. The architect prepares the plans and specifications for the building and supervises its erection. So the accountant prepares the plans and specifications for the accounting system and supervises their installation.

The analogy stops here, however, for the architect's work is finished with the completion of the building; but the construction of accounts and records is a continuing process and involves the creation of continuous records as long as the business continues. But with a proper foundation for the accounting system, the recurring fiscal periods represent more or less of a repetition of what has gone before with such provision as may be required by such changing conditions as may occur in the nature and volume of the industry.

This article is intended to cover only the fundamental or underlying principles of constructive accounting, without undertaking to describe or provide for specific plans, departments, or forms of records. There are many and varied lines of business and equally as many so-called "accounting systems."

Each is a vehicle for transportation to an ultimate destination; and the selection of the particular records or forms of records must be determined by the special needs of the special line of business, with due consideration not only for the ultimate results, but of the ability to obtain those results with vehicles best adapted to safety, economy, speed, and routing, the necessity for accurate knowledge as to all elements and factors, always bearing in mind not only the possibility but the probability of the necessity for retracing the forward movement.

COST ACCOUNTING AND COST ACCOUNTANTS

BY ARTHUR LAZARUS *

IT is not hard to discern the reason for the widespread interest in cost accounting existing at the present time, evidence of which we receive almost daily across our desks at the Fabricated Production Department. It has been said so repeatedly as almost to deprive it of significance that business conditions have changed, that we are entering a new epoch, that competitive conditions will be severe and the survivorship limited strictly to the efficient, and that old business methods must give place to the new. Wherein consists this change, reference to which is made so often and which is defined so rarely?

In the first place, the war has made extraordinarily difficult the transaction of business abroad. The demand for our products undoubtedly exists, but the ability to pay has been seriously impaired, and the faith we might ordinarily possess in the integrity of these potential customers is complicated by the uncertainty of political and social conditions abroad. At home the scope of markets in certain industries has been radically changed by the increase in freight rates, yet if railroads are to be assured a fair return on investment will it not be some time before freight rates reach 1913 levels? Meanwhile the country is facing a three or four billion dollar budget which, whatever the mode or manner of collection, is a first charge against business and which serves to constrict the margin of doing business. The drop in demand has left the manufacturer, temporarily at least, with facilities in excess of production requirements, upon which facilities the interest and other fixed charges continue accruing. There has been some easing off in the matter of interest, but long time accommodations for manufacturing purposes are still difficult to secure and command a price. Again, many manufacturers are responsive to the demand for better working conditions, for giving employees a share in management, for re-establishing an intimate relationship with their workers, for providing more continuous employment, all of which costs money.

Faced by a similar situation, the business men abroad, on the Continent, might combine to fix prices and regulate production, but none of these things can be done lawfully here. "I was greatly surprised," said a French engineer visiting North America, "to see the co-operation which exists between most of the large paper mills. These mills keep continually in touch with one another, exchanging new discoveries as well as improvements affecting new equipment, even going so far as to exchange costs. We have merely a few small associations known as syndicates, the main function of which is to keep prices uniform."

There is the difference. Our business men, even if they would, cannot keep prices uniform. It is necessary for them to work out their problems on different, and what we conceive, as better lines; by improving their methods of selling, purchasing, manufacturing, distributing, and accounting, by getting more information about their own business and of their industry and

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of general business conditions without. So we have business men turning more and more to standardizing their products, to eliminating excess varieties, to establishing production statistics for their industry, to improvements in their cost accounting methods.

II

There are many indications of the widespread interest in cost accounting. A number of new journals treating of cost accounting have appeared. An increasing number of colleges are including cost accounting somewhere in their curricula while the work of Harvard University for retailers is finding its way into many a small shoe, grocery, drug, and hardware establishment. There have been large accessions to the ranks of the Taylor Society and two cost associations are in the field.

This keen interest in cost accounting is manifested in a more intimate way in the work of this department. Each of the publications of the Fabricated Production Department has been most cordially received and what is of more importance is the fact that business men are changing their accounting methods to conform to the recommendations of these publications. The Department recently issued a pamphlet on "Perpetual Inventory or Stores Control," which is a subject that has been discussed rather thoroughly in the last 15 years and with considerably more finality than may be said of other phases of cost accounting, nevertheless, within 10 days after the release of the pamphlet all but 2000 of the original edition of 10,000 were exhausted.

Another manifestation of the widespread interest in cost accounting is the formation of cost groups within chambers of commerce, of which there are now 14 with a probability of additional groups being formed shortly in some 25 other chambers of commerce.

The trade association, like the chambers of commerce, is also feeling a new interest in cost accounting. Of these associations 120 have made an attempt to standardize cost accounting methods. Even more indicative is the growing tendency on the part of these trade associations to put cost accounting on a permanent basis as a continuing service to members. Also we find industries, such as the tanning, newsprint, and laundry, employing the full time service of a cost expert, while others, as in the case of refractories and biscuit and cracker, have organized their cost accountants in a cost club where they come together to discuss mutual cost problems and provide for cost developments. The paper industry has established a separate cost association with an expert accountant at its head. This cost association holds semiannual cost conventions of two or three days duration. The comprehensive plans of the garment industry and the actual accomplishments of the printers and the millwork cost bureaus are too well known to call for special comment. An ever-growing number of trade associations are placing cost work on a permanent basis.

III

Much remains to be done to make cost accounting the instrument of service it should be to business men. The fact cannot be concealed that, coupled with the tremendous interest in sound cost accounting is an immense dissatisfaction with cost systems that give results too late for action, that are burdened with excessive details and red tape, that do not function effectively in times of adversity when they are most needed. It is undoubtedly true that we are not even approxi-

mately receiving the service from our cost systems that we have a right to expect, and there is a large field of usefulness before the cost accountants of the country in increasing the effectiveness of their cost systems.

In doing this our accountants should not make too radical or sudden departures from present practices. It is plainly to be seen that cost results will be increasingly expressed in terms of times and quantities, and in terms of percentage variance from standards, and that classification of accounts will develop a functional rather than financial character. And yet it will be wise to modify present cost practices, slowly, for cost progress at best can only come after thorough discussion and wide experiment, and at a rate determined by the ability of our establishments to absorb and assimilate new ideas. It would be suicidal for an organization to attempt to use cost accounting as a measure of efficiency if it does not already know or include in costs all the just charges of doing business, or has not heretofore segregated its expenses to give true commodity, job, or departmental profits.

The kind of cost study that will yield definite accomplishment is not always the most spectacular in character. There is, for instance, a great need to establish the status of accounting terms. It will probably be admitted that much of the confusion that arises in the world of cost accounting, as in the larger world without, arises because we are not speaking the same language, because we indiscriminately call the same thing by various names, because we do not mean the same thing by the same term. Further it is probable that some of the problems that are causing trouble, such as whether interest on invested capital should be included in costs, would disappear upon disentangling cost terminology.

What do we mean when we use the term "Cost Accounting?" Is it accounting for all expenditures as a basis for establishing sales prices, or is it a method of accounting that will give department, job, or commodity profits, or is it a procedure that will aid in the elimination of waste, or is it all three of these things? Who can tell where scheduled costs fade into specification costs, or specification costs merge into budgeted costs, or budgeted costs lapse into standard costs, and standard costs reappear as estimated costs? Where is the line of distinction, if any, among these terms? There is much patient ground work of this sort to be done before cost systems will function as smoothly as they should.

IV

At the present time a committee composed of representatives of numerous associations is endeavoring to standardize management terminology, and this committee necessarily ventures some short distance into the terminology of cost accounting. In running over the terms listed for definition by this committee we are surprised at the failure to include "Cost Principle" among the terms defined, for in a very direct manner our conception of the nature of a cost principle will influence the subsequent development of cost systems. If we regard cost principles as timeless and inflexible, and "given from on high" to be preserved intact at all hazards, cost progress will be unnecessarily difficult. In practice we accumulate a great multitude of facts, many seemingly contradictory in character, and studying this mass of data make a bold generalization to which all of the facts do, or will probably, conform, and this synthesis, this highly crystallized and condensed expression of many facts, is

known as a cost principle. But then when new situations arise which contradict these so-called cost principles we must not try to fit the new facts into grooves to which they do not belong, rather must we modify or abandon our hypothesis—the cost principle.

There is, for instance, the general truth that current production shall bear current costs. Of course, situations arise daily in connection with bad debts, depreciation, interest, organization charges, advertising, and leaseholds which require us in varying degree to modify its application, however, this cost principle works out well.

But what happens when there is a slump in business? Just this—that the fixed and semifixed expenses go right on, and when the attempt is made to apply current costs to current production, abnormally high unit costs result, leaving the business man the alternative of utterly disregarding his cost figures or of setting prices so high as to throttle business at a time when the need is for more and not less business. By all means hold on to the general truth that current production shall bear current costs but give it the breadth, elasticity, and inclusiveness that modern business requires.

V

Though cost principles may be modified from time to time, they are stable compared with the ordinary facts of business, and so it is important that those few cost fundamentals on which there should be general agreement and uniformity be segregated from those cost accounting details in the working out of which a latitude of practice is permissible and quite harmless. Professor Burchell in a recent tentative statement of things he regarded as indispensable in a cost system cites the following fundamentals:

1. The cost of each unit must contain all the charges required for its production.

2. The cost of each unit of product must be determined on the basis of the material, labor, and expense used and required for its production.

3. The cost of the product must be reconciled with the cost to produce.

4. The cost of sales should be determined on the basis of normal conditions during a cycle of time.

5. Reports for executives should be so classified and compiled from summaries of original data that any item may be readily traced to the original charge and correctly explained.

6. All operating accounting should be interlocked with the general books and controlled by double-entry system of bookkeeping.

7. Having established a system of industrial reports, records, accounts, and statistics, all must be made of greatest effectual service, practicable for executives and management, but with rigid discrimination and economy.

It is undoubtedly a very profitable thing to disengage that which is of more nearly enduring importance in cost accounting from that which is fleeting and transient in character. As a matter of fact, as already intimated, approximately 120 industries have achieved or attempted this very thing through their representative trade associations in the endeavor to establish uniform cost methods.

But why adopt uniform cost methods? Because no manufacturer, however large or efficient, has a monopoly of the best practices in an industry, and there is much to be learned even from the least of his competitors. Accordingly, there should be the freest interchange of experience and methods, and improvements in manufacturing as typified in cost accounting results should be made available to all. In that way the standards to be striven for, while still individual, will be vastly bettered.

They will not only be the best practices of a particular plant but the best attainments of an industry. In that way the progress of efficiency in an industry can go forward steadily and undeviatingly. This proposal, it is true, calls for unselfishness, but it is the test numerous trade groups are meeting willingly, cheerfully, and successfully.

There is also a selfish side to uniform cost methods. Our most troublesome competitor is often the least efficient, and the most ignorant, and it is worth while to attempt his enlightenment. No one will consistently sell below cost if he really knows his cost or possesses a cost system that will give him sound results. But to help him some measure of uniformity is essential. I was discussing the other day with an engineer a comparatively simple operation, unloading 4/4 lumber from a freight car to pile, and he asked for some costs per thousand. I suggested $1.50. He said he had attained $1.35. "But, did you include the straw boss?" I asked. "No," he replied, "but did you include the tally clerk?" Our discussion ended there, but doubtless half a dozen other points of difference would have been disclosed if we had further analyzed this simple operation of unloading lumber. Now, if we were to make any progress in checking relative efficiency in unloading lumber from a freight car to pile the first thing necessary would be to define the operation; in other words, to arrive at a uniform cost method. And so it is a decided gain for any industry if a manufacturer is able to study his summary of manufacturing costs and feel reasonably sure that A, B, and C, his competitors, are figuring their costs in substantially the same way that he is and that such differences in costs as exist arise from superior efficiency and not from cost ignorance.

VI

There are, however, certain shortcomings in the movement for uniform cost accounting. Of the 120 lines that have attempted uniform cost accounting perhaps 40 have stopped with the classification of accounts. A classification of accounts is but the crudest beginning of uniform cost methods and if it is to be the entire extent of such an undertaking in any trade association it might just as well not be considered at all.

For those industries that are not in a position at the present time to make a sizable investment in outside cost assistance it is probable that the best way to advance uniform cost methods is not to attempt the problem as a whole, but to study, one by one, specific phases and problems of cost to approach the standardization of the methods as a whole by the standardization of the treatment of the various elements entering into costs. Particularly must it be borne in mind that feverish campaigns for uniform cost methods upon poorly prepared ground should give way to more comprehensive campaigns of cost education and enlightenment and that from the standpoint of association activity, cost accounting work is never done, that we must keep everlastingly at it.

Coming to the cost standard about which so much is heard, the matter is so important as to require at least a brief consideration of what is meant by the term. A cost standard is a measure of cost, a mark to shoot at, a goal to strive for and improve. But the cost standard should not be one that is only hypothetical or desirable but one that is realizable and has been attained in actual practice under ordinary supervision and ordinary working conditions. To use an illustration from the realm of sport, the best time for the 100-yard

dash is 9 3/5 seconds. Under certain ideal conditions it may be possible to run 100 yards in 9 2/5 seconds, but until the 100 yards have been covered in 9 2/5 seconds, under the ordinary rules of contest the standard will remain at 9 3/5 seconds. That, in other words, is the best attained practice. While standards should be based on accomplishment rather than theory those in charge will, of course, constantly strive to improve past standards by ceaselessly studying operations, eliminating waste motion here, changing a jig or fixture there, etc., and they may find this work of maintaining and excelling past standards facilitated by making it profitable for those who come up to par, through the adoption of some sort of bonus system.

The next point, so far as possible cost standards should be expressed in terms of time and quantities rather than in dollars and cents. Cost systems have fallen of their own weight when the attempt has been made to check in terms of dollars and cents the efficiency of each labor performance and of every consumption of material, nor has such cost information been very meaningful. The reason for this follows. Cost results given in terms of dollars are not basic data. The basic data are times and quantities. The value of the dollar fluctuates. The dollar of today is not the dollar of a year ago or a year hence, consequently comparisons are difficult when results are expressed in dollars and obtained at various times. On the other hand, an hour is always an hour and a pound is always a pound, and comparisons of time and quantities require no special allowances and special considerations and such data are of continuing usefulness and of cumulative importance. Why not, then, in the first place compare performance in terms of times and quantities?

VII

Coming to the work of the individual cost accountant, there can be little sympathy with one who steadily perceives the limitations rather than the boundless opportunities of cost accounting. If in our respective establishments cost work is not given the recognition that is its due, we have ourselves and not cost accounting to blame. Do we in our cost work fully realize the fact that executives are busy men with any number of things to do, and that they have neither the time nor the patience to wade through a mass of details? Do we accordingly make our cost reports simple and concise, touching the principal and salient points of information? Do we try to interpret cost results or do we force the executive to draw his own conclusions? Do we use graphical charts and percentages wherever possible and do we afford ready comparisons with past or standard performance? Do we keep our cost figures locked up tight within our own department, or do we give them wide publicity so that they may reach the entire organization down to the foremen and individual workmen? Do we make a practice of calling conferences to present and discuss cost results and are we prepared to answer the questions the shop executives in particular will put to us? All of these methods are being used to make cost accounting a distinctly vital and indispensable part of management.

It is a mistake to feel that occupations and professions are fixed, unchanging quantities. At the start of an enterprise perhaps the engineer or the financial man is the most important. When operations have been started and markets are required, there comes the turn of the sales manager and advertising man. When the plant is running

overtime in an effort to keep pace with orders, the purchasing agent and production and personnel managers assume an added importance. When, however, competition becomes keen, or more still when "the bottom falls out" and economy and retrenchment are the watch words, the executive instinctively turns confidently to the cost accountant.

The day of easy profits is gone, gone perhaps irrevocably, and executives are more than ever in a responsive mood to hear the cost accountant's message. To the general manager he can show from the business tragedies of the past six months that there is no lasting satisfaction and no security in more growth, in more sales, in immediate profits, but that the permanent factor which counts in business is this matter of costs. There is perhaps no greater service the cost accountant can perform at this time for the general manager than to help him formulate a budget which will yield a reasonable profit on a normal year's business and set a standard which if not maintained will mean less than a fair return on investment, and which, if much exceeded, will involve financial risks incommensurate with the possible additional return. This budget should be framed in such a way as to provide for balanced production and continuity of operation. In other words, it will allow for the fullest utilization of production facilities, and to that end the cost accountants will check and condemn the tendency to manufacture anything and everything for which there is a possible demand and will bring dependable cost figures to support the expensiveness and wastefulness of such practice.

To the sales manager the cost accountant can give information that will enable him to push the lines upon which there is the most satisfactory profit. He will show that it requires a greater selling effort to sell some lines than others perhaps less favored and he can provide the sales manager with a differential of selling percentages. He may also attempt a finer distribution of branch sales office costs to show more clearly the effectiveness of various sales units. It is a fact that under methods still in vogue of charging selling costs, branch offices that do the most business are often penalized the heaviest and those that do the least escape the odium of their own shortcomings. This much is clear, that those selling expenses that can be directly charged to a branch office should be so charged and that the indirect selling expenses should be distributed on the basis of what the office ought to produce—on its sales quota and not on the basis of the business it actually transacts.

The cost accountant can strengthen the hand of the personnel manager too. A worker is most concerned in keeping his job, in steady employment, and when the accountant draws up the budget he will provide for a fair continuity of operations. Much remains to be done to bridge the gaps in employment and he will be called upon in ever-increasing degree to suggest ways and means of so doing. In one market of a highly seasonal industry employers are guaranteeing work of a minimum of 41 weeks per year.

There is another service the cost accountant can render the personnel manager. If, on one hand, his efforts are directed towards securing continuity of employment for the worker, he will on the other, seek to establish standards of performance that wages may have a fact basis and in this way lift wage questions out of the atmosphere of heated controversy and mutual recrimination. It is interesting to note that in the industry just noted where workers have been guaranteed a mini-

mum of 41 weeks of employment per year, standards of performance have been worked out jointly by employers and employees.

VIII

There is a growing appreciation and understanding on the part of factory managers, superintendents, and foremen of the nature of the service the cost accountant is performing for them. What the cost accountant is really doing is to safeguard the factory executive from cost results vitiated by outside factors over which he has no control. The factory executive is not responsible for the fall or rise in the price of materials, for the fall or rise in the cost of living, for the increase or decrease in the number of orders and our cost results must eliminate these factors if we are to hold the factory executive accountable. And so the cost accountant has established standards of labor performance, standards of material consumption, standards of factory overhead, standards of auxiliary service by which to compare actual results so that the executive may have a fair index or measure of the efficiency of his factory.

All this means that the cost accountant is coming into his own. We have evidence of this from all sides. Here we see him as vice-president of a far-flung electrical manufacturing company, there we see him as the chief executive of an impressively large establishment devoted to the graphic arts, again we find him as managing director of an exceptionally well-equipped garment company and yet again we find he is the key man in a paint establishment doing a business of over $75,000,000 a year. And so it goes. His opportunity is measured only by his ability.

FIRE INSURANCE COMPANY ACCOUNTING—III

BY WILLIAM B. WIEGAND*

AFTER the amount of assets available for the discharge of liabilities has been ascertained, in the manner shown in the article published in the July number,[1] the remaining step is to determine the company's obligations. These charges against the resources fall into two main groups, as follows:

1. Those due to policyholders
2. Those due to other individuals and firms

Of the former charges, the amounts due policyholders in settlement of losses and claims is the first item in the fifth section of the financial statement headed "Liabilities" (Figure 1). This item is generally a non-ledger liability, although there are a few insurance accountants who prefer to bring it into the ledger by a journal entry charging losses and crediting unpaid losses with the amount of estimated losses each month, and charging to the latter the payments made in settlement. As the managers of loss departments are usually quite liberal in their estimates of what will be the ultimate loss, it is invariably necessary to make an adjustment of the excess of estimated amount over the payment by a credit to losses and a charge to unpaid losses, which is in effect a partial reversal of the original entries.

While this method is more correct from an accounting standpoint, it entails considerable labor, since the ledger account must be analyzed to obtain for the Disbursement Statement the amounts of losses paid during the year. If this is not done, it becomes necessary to prepare from the Loss Register a list of all unpaid losses, grouped first as to the nature of the risk, as shown on lines 2 to 13 inclusive, in the Statement of Liabilities (Figure 1) and then subdivided as to status, i.e., adjusted, reported, or in process of adjustment, incurred but not reported, and resisted. From the total of this subdivision for each class of business is deducted the reinsurance in companies authorized in New York to give the net unpaid claims.

As the annual report need not be filed until February 15, it is possible and permissible to substitute the amounts paid after the close of the year and before filing, for the amounts estimated. In view of this, it is required that all losses incurred prior to closing, but reported subsequently, be taken up as a liability in (3) of the indented columns in the Statement of Liabilities. It will be apparent that taking up actual payments and including subsequently reported losses interferes with the plan of making unpaid losses a ledger liability. At the time the unpaid losses are drawn off, the estimated expenses of investigation and adjustment, classified as to those on paid losses and those on unpaid losses, may be ascertained.

Although contingent in nature, the most important liability of a fire insurance company, both as to volume and as to the manner of ascertaining it, is what is termed the unearned premium reserve. There are three reasons for this obligation. The first is the accounting principle which cautions

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[1]See *Administration* for July 1922, p. 81.

Form 2 ANNUAL STATEMENT OF THE ______________________ 5
(Write or stamp name of company)

V.—LIABILITIES

1. Losses and Claims:	(1) Adjusted	(2) Reported or in Process of Adjustment	(3) Incurred but not Reported	(4) Resisted	(5) Total	(6) Deduct reinsurance per Schedule E, in Companies authorized in New York (including "B" Companies) columns (2) and (4)	(7) Net Unpaid Claims
	$	$	$	$	$	$	$
2. Fire							
3. Ocean marine							
4. Motor vehicles							
5. Aircraft							
6. Inland navigation and transportation							
7. Tornado, windstorm and cyclone							
8. Hail							
9. Sprinkler leakage							
10. Riot, civil commotion and explosion							
All other, viz:							
11.							
12.							
13.							
14. Totals	$	$	$	$	$	$	$

14. Totals .... $

15. Estimated expenses of investigation and adjustment of losses (paid losses, $______; unpaid losses, $______)

16. *Gross premiums (less reinsurance) received and receivable upon all unexpired fire risks effective on and after January 1, 1921, $______; unearned premiums thereon, per recapitulation, page 7, item 18, column 6 .... $______

17. *Gross premiums (less reinsurance) received and receivable upon all unexpired risks, other than fire risks, effective on and after January 1, 1921, $______; unearned premiums thereon, per recapitulation, page 7, item 31, column 7 .... ______

18. *Gross premiums (less reinsurance) received and receivable upon all unexpired risks effective prior to January 1, 1921, $______, unearned premiums thereon, per recapitulation, page 7, item 51, column 6 .... ______

19. Total Unearned Premiums as computed above ....

20. Amount reclaimable by the Insured on perpetual Fire Insurance Policies, being______per cent of the premium or deposit received ....

21. Net Premium Reserve and all other Liabilities, except Capital, under the life insurance or any other special department ....

22. Unused balances of bills and notes included in admitted Assets, taken in advance of Premiums on open Marine and Inland Policies or otherwise, returnable on settlement not included in items 16, 17 and 18 above ....

23. Principal unpaid on scrip or certificates of profits authorized or ordered to be redeemed ....

24. Interest due or accrued, including $______on borrowed money ....

25. Dividends declared and unpaid to stockholders, $______, to policyholders, $______ ....

26. Salaries, Rents, Expenses, Bills, Accounts, Fees, etc., due or accrued ....

27. Estimated amount hereafter payable for federal, state and other taxes based upon the business of the year of this statement ....

28. Contingent commissions or other charges due or accrued ....

29. Funds held under reinsurance treaties ....

30. Due and to become due for borrowed money ....

31. All other liabilities, viz: ______

32. ______

33. ______

34. Total Amount of All Liabilities, Except Capital .... $

35. Capital paid up .... $______

36. Surplus over all Liabilities .... ______

37. Surplus as regards policyholders ....

38. Total .... $

39. Amount of such surplus which constitutes a permanent reserve fund represented by scrip which by the terms of its issue cannot be redeemed so as to diminish said reserve (carried inside), $______

*By Gross Premiums is meant the aggregate of all the Premiums written in the Policies or Renewals. Are they so returned in this Statement? Answer:______

Figure 1. Statement of Liabilities

POLICIES WRITTEN FOR A TERM OF	ONE YEAR	TWO YEARS	THREE YEARS	FOUR YEARS	FIVE YEARS
NUMERATORS WHEN WRITTEN IN					
JANUARY	1	25	49	73	97
FEBRUARY	3	27	51	75	99
MARCH	5	29	53	77	101
APRIL	7	31	55	79	103
MAY	9	33	57	81	105
JUNE	11	35	59	83	107
JULY	13	37	61	85	109
AUGUST	15	39	63	87	111
SEPTEMBER	17	41	65	89	113
OCTOBER	19	43	67	91	115
NOVEMBER	21	45	69	93	117
DECEMBER	23	47	71	95	119
AT THE END OF		YEARS	OF	TERM	
YEAR IN WHICH WRITTEN	1	2	3	4	5
FIRST YEAR THEREAFTER	2	3	4	5	
SECOND YEAR THEREAFTER	3	4	5		
THIRD YEAR THEREAFTER	4	5			
FOURTH YEAR THEREAFTER	5				

FIGURE 2. TABLE SHOWING NUMERATORS OF UNEARNED PREMIUM FRACTIONS

against anticipating earnings, for where the premiums charged extend over a period of from one to five years, it is plain that the amounts received are not earned until the expiration of those periods. The second reason is the provision in the standard form of policy whereby the contract may be canceled by either party. If the insured requests cancellation, the company must, upon the surrender of the policy, refund the excess of the paid premiums above the customary short rates for the expired time. If, however, the cancellation is by the insurer, it must refund the unexpired premium calculated on a pro rata basis. As the pro rata basis requires a greater refund than the short rate tables call for, the carrier must withhold the unearned premiums from its surplus on that basis.

The third reason for the unearned premium liability is an express provision of the insurance law dealing with the determination of liabilities. This provision is to the effect that there shall be charged against the assets a sum equal to the total unearned premiums in force calculated on the gross sum charged to the policyholder, without deduction on any account, on each respective risk from the date of the issue of the policy. Instead of following this rule explicitly, however, companies other than those reinsuring all outstanding risks are permitted to average their liabilities by one of two methods.

In theory, it is regarded that all policies are written on the fifteenth day of the month in which they are issued, to expire on the fifteenth day of the same month one or more years later. Thus a one-year policy written in January 1922, will have, on December 31, 1922, fifteen days of January 1923, to run before expiration, and policies written in subsequent months will have unexpired at the end of the calendar year two additional half-month periods for each later month taken cumulatively. The number of these half months will then give the numerator of the fraction of unearned premiums, the denominator of which is 24, 48, 72, 96, and 120 on one-, two-, three-, four- and five-year policies, respectively.

The table shown in Figure 2 has been devised to show the numerator of the fraction unearned on any policy written in any month for periods of from one to five years. In this table all figures to the left of each distinctive style of ruling represent the number of half months in the period limited by the number of years appearing at the head of the columns. In other words, the table is in reality a set of five tables superimposed one on the other to avoid repetition.

By way of illustrating the use of this table, let it be assumed that in January 1922, policies numbered one to five inclusive are written for a period of one, two, three, four and five years, respectively. At December 31, 1922, the end of the year in which the policies were issued, Policy 1 will expire on January 15, 1923, and will have one-half month to run, giving a fraction unearned of 1/24; Policy 2 will have the full year 1923 and half of January 1924, to run, or 25/48; Policy 3, the full years 1923 and 1924 and half of January 1925, or 49/72; Policies 4 and 5 on the same basis will have unearned 73/96 and 97/120 respectively.

With the expiration of each succeeding year, there is necessarily a change in the numerators, which can be determined by taking up the figures appearing in the next columns in the table to the left, according to the number of years that have elapsed. To illustrate this, the unearned fractions of the above policies at the end of each year until all have expired are as follows;

Policy Number	At the End of			
	First year	Second year	Third year	Fourth year
1	......	......	......	......
2	1/48	......	......	......
3	25/72	1/72	......	......
4	49/96	25/96	1/96	......
5	73/120	49/120	25/120	1/120

As a further illustration, let it be assumed that a policy was issued in August 1920, to expire in four years, and that another policy was issued in August 1919, to expire in five years, that is, both policies expire in the same month of the same year. At December 31, 1922, the end of the second year of the four-year policy and the end of the third year of the five-year policy, each will have the entire year 1923, and seven and a half months of 1924 to run before expiration. The total half months is thus 39, which can be verified by consulting the table in Figure 2 in the columns for four- and five-year terms at the end of the second and third years after issue, respectively.

Of the two methods of applying the fractions previously mentioned, the first, or the annual basis, consists of totaling the number of half months in the column for each year as is shown below and then dividing each total by twelve to obtain an average fraction for the year. At the close of 1922, the unearned fractions on policies during the various months of that and previous years and expiring in the years indicated are computed in the manner shown in the tabulation below.

The final fractions are those printed in the supporting schedule of the convention blank and are the same as would be obtained if all policies were considered as written on June 30, and

Month	Year				
	1923	1924	1925	1926	1927
January	1	25	49	73	97
February	3	27	51	75	99
March	5	29	53	77	101
April	7	31	55	79	103
May	9	33	57	81	105
June	11	35	59	83	107
July	13	37	61	85	109
August	15	39	63	87	111
September	17	41	65	89	113
October	19	43	67	91	115
November	21	45	69	93	117
December	23	47	71	95	119
Total	144	432	720	1008	1296

Term Begins	Term Expires	Total	Divided by	Equal to	Denominator	Fraction
One year					24	
1922	1923	144	12	12		12/24 or 1/2
Two years					48	
1921	1923	144	12	12		12/48 " 1/4
1922	1924	432	12	36		36/48 " 3/4
Three years					72	
1920	1923	144	12	12		12/72 " 1/6
1921	1924	432	12	36		36/72 " 1/2
1922	1925	720	12	60		60/72 " 5/6
Four years					96	
1919	1923	144	12	12		12/96 " 1/8
1920	1924	432	12	36		36/96 " 3/8
1921	1925	720	12	60		60/96 " 5/8
1922	1926	1008	12	84		84/96 " 7/8
Five years					120	
1918	1923	144	12	12		12/120 " 1/10
1919	1924	432	12	36		36/120 " 3/10
1920	1925	720	12	60		60/120 " 1/2
1921	1926	1008	12	84		84/120 " 7/10
1922	1927	1296	12	108		108/120 " 9/10

expiring on the same date one or more years later.

On this basis, policies issued during the year 1922 will have unearned premium fractions at December 31, 1922, as shown in the table below.

These fractions are applied to the total net premiums in force in each year to give the amount unearned. In the second method of applying the fractions, instead of using an average yearly fraction, the fraction for each month as shown in Figure 2 is applied to the net premiums in force in the corresponding month and the unearned amounts are totaled to give the full liability.

Of these two methods, the annual basis is satisfactory only when the volume of business is uniform throughout the year. If there has been an increase during the second half of the year, the annual basis will yield a liability that is too low, and if there has been a decrease, it will yield a liability that is too high, as is shown in the computations in the first table on the next page.

On the annual basis, the unearned

Term of Policies—Years	Year of Expiration	Months Earned	Months Unearned	Fraction Unearned December 31, 1922
1	1923	6	6	1/2
2	1924	6	18	3/4
3	1925	6	30	5/6
4	1926	6	42	7/8
5	1927	6	54	9/10

One Year Policies Written in	Fraction Unearned	Premiums in Force	Premiums Unearned	Premiums in Force	Premiums Unearned
January........	1/24	$4,800	$200	$26,400	$1,100
February.......	3/24	9,600	1,200	21,600	2,700
March.........	5/24	7,200	1,500	24,000	5,000
April..........	7/24	12,000	3,500	21,600	6,300
May...........	9/24	10,080	3,780	16,800	6,300
June...........	11/24	12,000	5,500	14,400	6,600
July...........	13/24	14,400	7,800	12,000	6,500
August........	15/24	16,800	10,500	10,080	6,300
September	17/24	21,600	15,300	12,000	8,500
October	19/24	24,000	19,000	7,200	5,700
November......	21/24	21,600	18,900	9,600	8,400
December......	23/24	26,400	25,300	4,800	4,600
		$180,480	$112,480	$180,480	$68,000

Unearned Fractions at March 31, 1922, on Policies Written in	To Expire in				
	1922	1923	1924	1925	1926
April....................	1	25	49	73	97
May.....................	3	27	51	75	99
June.....................	5	29	53	77	101
July.....................	7	31	55	79	103
August..................	9	33	57	81	105
September...............	11	35	59	83	107
October.................	13	37	61	85	109
November...............	15	39	63	87	111
December...............	17	41	65	89	113
	A 81	C 297	E 513	G 729	I 945
	1923	1924	1925	1926	1927
January.................	19	43	67	91	115
February................	21	45	69	93	117
March..................	23	47	71	95	119
	B 63	D 135	F 207	H 279	J 351

Term Begins[1]	Term Expires	Symbol	Total	Divided by	Equal to	Denominator	Fractions
One year						24	
1921	1922	A	81	9	9		9/24 or 3/8
1922	1923	B	63	3	21		21/24 " 7/8
Two years						48	
1920	1922	A	81	9	9		9/48 " 3/16
1921	1923	B+C	63+297 = 360	12	30		30/48 " 5/8
1922	1924	D	135	3	45		45/48 " 15/16
Three years						72	
1919	1922	A	81	9	9		9/72 " 1/8
1920	1923	B+C	360	12	30		30/72 " 5/12
1921	1924	D+E	135+513 = 648	12	54		54/72 " 3/4
1922	1925	F	207	3	69		69/72 " 23/24
Four years						96	
1918	1922	A	81	9	9		9/96 " 3/32
1919	1923	B+C	360	12	30		30/96 " 5/16
1920	1924	D+E	648	12	54		54/96 " 9/16
1921	1925	F+G	207+729 = 936	12	78		78/96 " 13/16
1922	1926	H	279	3	93		93/96 " 31/32
Five years							
1917	1922	A	81	9	9	120	9/120 " 3/40
1918	1923	B+C	360	12	30		30/120 " 5/20
1919	1924	D+E	648	12	54		54/120 " 9/20
1920	1925	F+G	936	12	78		78/120 " 13/20
1921	1926	H+I	279+945 = 1224	12	102		102/120 " 17/20
1922	1927	J	351	3	117		117/120 " 39/40

[1] This is a continuation of table at bottom of page 223.

premium liability is one half of the total premiums in force, or $90,240, which is insufficient to the extent of $22,240 when the volume of business increased in the second six months, and excessive by the same amount where there has been a decrease in the volume of business. The agreement of the deficit with the excess is due to the fact that the same premiums are used in both cases, but in an opposite order. It is not relevant to the principle involved.

The average fractions for the year, i.e., those printed in the annual report, may be used at the close of any month if applied to the premiums written during the preceding 12 months, provided, as previously stated, the volume of business has been uniform. If the unearned premium reserve is to be determined at any date other than December 31, as for example, the dates of the quarterly reports at March 31, June 30, and September 30, and the volume of business is not uniform, and finally, the premiums in force are not kept by monthly expirations, another set of fractions must be used. These are shown for March 31, on page 223, together with the method of obtaining them, in the table above.

The procedure for other closing dates is identical with that shown in the foregoing table; the first month listed in the table is the one immediately following closing, and this with all others down to December are included in the first set of totals, A, C, E, G

and I. The second set consists of those from January to the month of closing of each successive year. Space will not permit showing the manner of obtaining these fractions and with the exception of June 30 and September 30 there is little practical use for them. The fractions for these two dates for each of the various annual terminations are shown below.

It has been necessary to discuss this matter in some detail, not only because of its importance, but also because the Premiums-In-Force Register must correspond with the method adopted. If the annual basis is followed, a sheet for the terminations in each year will be needed in the register, while if the monthly basis is used, a sheet for the monthly terminations will be required. In any event, the required sheets can be headed according to the years of commencement and expiration in one case, and according to the months of the year of commencement and expiration in the other. However, as two- and four-year policies are not quite as general as the other terms, the monthly sheets for these terms need not be inserted until required.

The first step in the clerical work of building up the premiums in force is the examination of the Premium Registers to determine the amounts covered and the premiums charged for each expiration. A favorable practice is to place a rubber stamp impression on the register sheet summarizing these computations, and then when all sheets for the month have been completed, to transfer them

Term Begins	Term Expires	Fractions	
		June 30	September 30
One year			
1921	1922	1/4	1/8
1922	1923	3/4	5/8
Two years			
1920	1922	1/8	1/16
1921	1923	1/2	3/8
1922	1924	7/8	13/16
Three years			
1919	1922	1/12	1/24
1920	1923	1/3	1/4
1921	1924	2/3	7/12
1922	1925	11/12	7/8
Four years			
1918	1922	1/16	1/32
1919	1923	1/4	3/16
1920	1924	1/2	7/16
1921	1925	3/4	11/16
1922	1926	15/16	29/32
Five years			
1917	1922	1/20	1/40
1918	1923	1/5	3/20
1919	1924	2/5	7/20
1920	1925	3/5	11/20
1921	1926	4/5	3/4
1922	1927	19/20	111/120

to the proper sheets in the Premiums-In-Force Register. This book is so simple in form that ordinary analysis paper may be used with columnar headings for the two sets of figures just mentioned. Where it is possible to do so, the number of the Agency Premium Sheet should be entered so as to provide means of checking back the entries.

It will be recalled that in describing the Cancellation Registers in the June number[2] mention was made of a column for the original premiums on policies canceled, which column, it was stated, is used for reserve purposes. A summary is made on each sheet of the Cancellation Register, but the original premiums—not the returned premiums—are summarized and transferred to the cancellation of Premiums-In-Force Registers. Inasmuch as the full amount of the premiums received was placed in suspense, that amount must be taken down when the policy is canceled, for if this is not done, but instead the returned premium is used, the effect will be to allow the premium actually earned to remain in the reserve.

These remarks as to both procedure and the use of the original premium apply to reinsurances and cancellations of reinsurances, which are in effect reductions of premiums written and additions thereto respectively. To the caution to use the original premium in reinsurances must be added the words "for the original term," as there is a tendency to use the term "the reinsurance will be in force." This error, in the case of reinsurances, results in an insufficient amount being deducted from the reserve and in the case of canceled reinsurances, in not enough being restored, so that the amount of premiums in force is misstated and the unearned portion of them is incorrect.

There are five different developments that may occur in the life of a policy:

1. Continued in force until expiration
2. Terminated by either party
3. Reinsured with some other company
4. Canceled by the reinsurer, but retained by the direct writing company
5. Terminated subsequent to reinsuring by either of the original parties

To consider the effect of these various developments on the liability of unearned premiums, let it be assumed that a company has issued in January 1922, four policies to run one year, having an annual premium of $240, with the eventual occurrence of the developments mentioned under 1, 2, 3 and 4 above. The fifth development need not be considered in the illustration, as its effect is negative. The table on page 227 brings out in detail the effect on the premium income and premiums in force.

There are thus at December 31, 1922, two policies with a monthly premium of $20 having a half month unexpired on each, a total unearned premium of $20. This verifies the unearned premium determined by taking 1/24, the fraction shown in the table in Figure 2, of the total premiums in force.

When the net premiums in force are computed by deducting cancellations and net reinsurance from the gross writings, the fractions applicable to the various terminations are calculated against the amounts thereof to obtain the total unearned premium liability to be shown in the balance sheet. Prior to 1921, a subdivision of the liability was not required, but commencing with that year fire insurance companies have been required to state separately the liability upon all unexpired fire risks and upon all unexpired risks other than fire risks, the latter to be supported by schedules showing the liability for each of the various classes of business written. As compliance with this requirement would have made the analysis of business written prior to

[2] See *Administration* for June 1922, p. 718.

		Premium	Income	Premiums in Force Expiring January 15, 1923	
January 15					
Policies issued	4		$960		$960
Less:					
July 15					
Policy canceled (2)	1	$120		$240	
Policies reinsured (3)	2	240		480	
Total deduction	3		360		720
	1		$600		$240
Add:					
October 15					
Policy reinsured canceled by assuming company (4)	1		60		240
Total	2		$660		$480

January 1, 1921, a very laborious task, fire insurance companies have been permitted to state the liability on such premiums without detailed classification until that business has expired.

The schedule supporting the liability upon fire risks shows in columnar form the year in which the policies were written, the term, the amount covered, and the gross premiums charged, thus summarizing the Premiums-In-Force Registers. In the next column is printed the fraction unearned when the annual basis is used, and this is followed by a column for the amount of premium unearned. To this schedule there is a footnote to the effect that in case the fractions unearned as printed do not produce the requisite statutory reserve, such fractions shall be disregarded and the reserve extended in accordance with the statutory requirements.

There is a disposition to confuse the purpose of the unearned premium liability and to regard it as something other than what it really is. To some it is a reinsurance reserve but if it were such a reserve, it is always overstated, as the unexpired premiums exceed what is needed to reinsure by an amount that would be allowed by the reinsurer as commission to the ceding company. The fact that assets equal to the reserve need not be converted upon liquidation of the latter has led to the fallacious notion that the reserve contains "unrevealed profits."

Neither is the unearned premium a reserve to pay losses notwithstanding the opinion of the lawyer who prepared L. O. 1032, 23-20-991, of the Income Tax Bulletin Service. In this it is said:

> The "unearned premium reserve" is not only a guaranty of payment of the policies against which it is held but also a fund to which resort may, in case of necessity, be made for payment of losses thereunder. If, during the life of any policy, a loss occurs the reserve established for the protection of such policy is released, and to that extent the reserve fund is reduced. If the reserve exceeds the amount of the loss and the policy is not continued in force, the excess becomes part of the general surplus of the company; it is "released to the general uses of the company." If, on the other

hand, no loss is incurred by the policy holder, upon the expiration of the policy, the whole amount of the reserve held against it is released to the general uses of the company and increases its "free assets."

This dictum is in part correct, as a payment of a loss does reduce the reserve through a reduction of the premiums in force. From these is deducted an amount corresponding to the premium chargeable for the indemnity, which unless there is a rate of 100 per cent must always be greater than the amount taken down. The actual reduction of the reserve depends on the time in the life of the policy at which the loss occurs, for there is a continuous, albeit unrecorded, diminution with each passing day. If an entire loss occurs on the first day a one-year policy is in force, the sum released would be equal to the full premium, but if it occurs on the last day of the term, the decrease will be only 1/365 of the premium, as the remainder has been previously earned.

If the writer of the opinion quoted above bases it on the theory that for the unearned premium reserve there are offsetting assets which are not "free," he is fortified by an implication from Section 21 of the New York Insurance Law, although there is no actual setting apart of such assets. The section referred to, however, disproves by its terms the contention that the reserve may be resorted to for the payment of claims as it provides:

Every corporation . . . whose assets and credits are not sufficient to reinsure its outstanding risks . . . shall be deemed insolvent and may be proceeded against as an insolvent corporation.

As the amount of the unearned premium can never equal the claim releasing it, the difference must be made up from other assets, and if these are insufficient, recourse cannot be had to the assets offsetting the unearned premium liability without bringing about the insolvency of the company.

Most of the remaining liabilities, due to individuals and firms other than policyholders, are either too infrequently met with to warrant present detailed discussion, or are self-explanatory. To the unpaid items in the office for salaries, rents, expenses, etc., are added those applicable to the period just closed but received subsequently. In some cases there will be an agreement with an agent whereby he receives an additional commission contingent upon the profit earned on the business written by him. The manner of determining this profit is the same as is followed in ascertaining the underwriting profit.

When all liabilities have been entered on the report blank, the total is deducted from the total of the asset sheet to give the surplus as regards policyholders. This last amount is divided into capital paid up and surplus over all liabilities. The paid-in surplus established at the time of incorporation is not stated separately but is included in the latter item. The reason for creating a surplus with the commencement of business will be apparent when it is remembered what items the company may take credit for as assets and what items it must charge itself with as liabilities. The asset arising from the issuance of a policy is the net cash received or the net amount due from an agent after deducting his commission, while the liability is the gross premium charged to the policyholder, the difference being an underwriting expense. Consequently, without the paid-in surplus, there would be an impairment of capital and a loss of financial strength essential to the protection of policyholders, the chief concern of the state in its supervision of insurance companies.

EDITORIAL REVIEW

PROBLEMS OF PERSONNEL

A year ago it was estimated that from four to five million people were without employment. Whether this estimate was extreme or not, if anyone had said then that within less than 12 months there would be more jobs than men and women to fill them, he would have been called an optimist of the most sanguine type. And yet, such is the situation which promises to confront the country within the next two months and has already characterized many important localities during the two months just behind us.

The seriousness of the labor shortage which awaits us will be better understood if we bear in mind the following facts: During the six months ending December 1921, the difference between immigration and emigration was a loss of 26,000 males and a gain of 66,858 females. Three strikes of large proportions have helped to create a deceptive impression of plentiful labor. Many textile workers and coal miners have already found permanent employment in other industries, and when the strikes are settled the last bit of slackness in the labor supply will probably disappear over night. Finally, and probably least obvious, is the fact that the progressive absorption of available labor means the progressive absorption of the less efficient. Just as the least efficient workmen were the first to be layed off when the demand for labor slackened, so they will be the last to be employed when the supply of labor runs short.

All of these facts confirm the opinion that problems of personnel will soon become at least as important as they were during the war and the period immediately succeeding. Those companies which, during the period of depression, discarded all or most of their personnel machinery will once more be compelled to resume it, but at the cost which greets the investor who remains out of the market until its recovery has been definitely established. Fortunately, many companies maintained the continuity of their personnel work, at least in its essentials, throughout the period of business depression. They made use of the period of liquidation to establish their work upon the soundest and most economical basis possible. A striking tribute to the progress made in new directions is given in the last report of the National Industrial Conference Board on plans of employee representation. This report shows that since August 1919, the number of voluntary employee representation plans increased from 105 to over 700.

That personnel activities should reflect the ups and downs of the course of business is only natural; for personnel work is after all but a phase of the profitable conduct of a business enterprise. The critical question here, as elsewhere, is: Has the period of depression served as an excuse to dispense with personnel work or as an opportunity to lay better foundations for the structure which is now in the process of building? The manner in which this question has been answered will soon begin to appear and we shall then see once more the difference between "pointing up the wall" with superficial personnel activities and developing these activities on the basis of an adequate foundation already prepared.

Henry C. Link.

THE STRIKE PROBLEM

At the present time a great strike among the miners of coal has paralyzed one of the vital industries of the country. Superimposed upon this comes the railroad strike with serious interruption of the steam roads—another vital industry—and sinister threats of wide extension. Desperate measures have already characterized both strikes, and the situation is serious. Meanwhile the daily loss to the employers, the strikers, and the public at large is measured in millions. And the loss is in the nature of a fire loss—of no benefit to anyone.

In addition to all this, each time a strike is fought to a finish it leaves behind it a trail of bitterness and antagonism that leads directly to further trouble. Also as the labor unions increase in size and co-ordinated effectiveness the struggle between labor and capital becomes fiercer, more destructive, and more dangerous. There is urgent need for some effective method of settling such disputes.

* * *

The present organization of the labor unions is based on the theory that the conflict between capital and labor is to be perpetual. Accordingly these unions are purely militant and their purpose is to fight for the rights of labor—or the rights of some particular branch of labor—as these unions see their rights. That is, American labor unions are not trying to find an equitable settlement of the differences between capital and labor but to get all they can for labor. On the other hand, the unions charge, and not without justification, that capital is imbued and actuated by a similarly narrow ambition.

As long as the controlling elements n both classes have no concern for the nterests of the public—of which they are a part—no permanent settlement of labor differences by the parties themselves is possible. Strikes and lockouts provoke retaliation and incite revenge. Accordingly in the widespread labor disturbances of the present day not only is there a tremendous property loss, both direct and indirect, but there is always a possibility of a collapse of the whole social fabric, as in Russia. Clearly the time has come when the community itself must intervene as a matter of self-preservation.

* * *

But what form shall this intervention take? At an early period in our racial history differences of opinion between individuals as to religion, social conduct, and the rights of property were usually settled by personal conflict. Kith, kin, and followers frequently assisted and the results were disastrous to social progress and the better interests of the race. The remedy, slowly evolved, was the institution of courts for the orderly settlement of conflicts of interest, and for the punishment of those who disturbed the peace. The remedy was, and is, far from perfect. The courts were, and are, frequently wrong in their decisions, but it is better for the community and better for the disputants to compel these to submit their controversies to the arbitration of some regularly instituted tribunal and to enforce their obedience to its decrees rather than to allow them to fight it out. Similarly the feud between capital and labor has now reached a situation in which the interests of the community at large require the establishment of tribunals analogous to our courts of law in which such disputes may be decided.

* * *

Tribunals for arbitration of labor disputes are already functioning with more or less effectiveness in different

parts of the civilized world. The difficulty is found in the enforcement of their decisions. The railway wage question was decided by the United States Labor Board but this tribunal though empowered to make decisions, has no power to enforce decisions; hence the present railway strike. Some method of enforcing such decisions must be found.

It cannot be doubted that a method may be found. In achieving an orderly social life all of us have to part with more or less of individual liberty. The exact limit has never been defined and never will be. If capital and labor cannot use the liberty of action they now have without inflicting loss and injury on the community as a whole, the community as a whole will assuredly at last find ways to compel respect for its rights.

* * *

It is to be remembered that the growing moral sense of the community has led it far in the protection of labor. In the vast body of legislation that safeguards labor from dangerous machinery, that regulates its hours, that requires safe and healthful working conditions and provides compensation for its injuries, the community has entirely repudiated the so-called economic law of supply and demand as applied to the employment of labor. The increasing insistence that in every industry a living wage shall be paid departs yet further from the theory of *laissez faire*. But if the community interferes in this way to protect labor from exploitation and oppression by capital, the community has an equal right to interfere to protect itself from unwarranted losses through labor strikes and to protect investors of capital from unfair demands by the workers, or from unfair methods of enforcing fair demands.

That no man can judge his own case fairly is axiomatic. Every law enacted to protect labor from the exploitation of capital met with opposition from the capitalistic class. As militant organizations the labor unions will oppose any laws to restrict their liberty of action. Nevertheless, the best interests of labor, of capital, and of the public would be served in the compulsory settlement of labor disputes by some tribunal not influenced by any direct interest in the matter in dispute.

The advantage of our present courts of law is found in the fact that a disputed question is decided positively by an authoritative tribunal. The court may be wrong, but its decision must stand. The parties have to submit even though they are not satisfied. Similarly, when we have established tribunals for the decision of labor questions, the parties immediately concerned, and the community at large will have no assurance of infallibility, but, if the decisions made by these tribunals are respected, the waste, the losses, the hard feelings incident to strikes and lockouts will be avoided and, as with our present courts of law, in most cases the decisions will be right.

WHO SHOULD GET THE BONUS?

The bonus bill is not dead. It is not even sleeping. It is merely biding its time until it can again claim the attention of Congress. There is in the country at large a strong sentiment in its favor—a sentiment that one cannot help thinking is based on a misapprehension.

It is commonly assumed by those who favor the proposed bonus bill that the soldiers in the late war fought and saved the country for those who stayed at home—for those who were by reason of sex, age, or other disability unable to join the ranks and who

therefore did their part in other ways. Under this assumption, the involuntary stay-at-homes are classed as ingrates because they are reluctant to add yet further to the country's overheavy burden of taxation in order to give a bonus to the soldiers of the Great War.

Our soldiers across the seas did save the country for those who stayed at home but they also saved it for themselves. They had as much or more at stake than any other class in the country. A life interest is all that any one has in his native land and these young men with their long lives before them were at least as much concerned in the salvation of the country as any one else. If they had refused to fight—if the country had not been saved—they together with the rest of their countrymen would have lived in a world dominated by German despotism.

Again, save for a negligible number of slackers, every man, woman, and child in the country helped to save it. The army in the line could not have fought without the support of this greater army behind the line. No one in the country but suffered and made sacrifices for the country's sake and to win the Great War.

As we all participated in the saving of our country, on what do our soldier boys base their claim for a special bonus? It can only be on the presumption that they did more to save the country than their compatriots. But did they? Was their sacrifice and service greater than that of the thousands of overseas workers who gave their time and risked their lives to nurse the sick and wounded and to look after the comfort of those who were well?

Is it a question of degree at all? If so, why should the boy member of the students' training corps who never left the drill ground, and never took a greater risk than that of catching cold, have the same bonus as the soldier who saw service on the other side? Or why should the recruit who never got further than the training camp receive the same recognition as the veteran who went over the top?

Is not the whole thing illogical? War is a catastrophe and all the world suffers. The loss can never be made up. The boys who went overseas did their duty, and the women who stayed at home and made bandages did theirs, and to reward one and neglect the other is rankly unjust. If a bonus is to be given, it should be given to all who participated, and in some proportion to the service given by each.

* * *

But, argue the soldier boys, what rankles is the fact that while we were risking our lives on the firing line at $30 a month the men comfortably at home and risking nothing were getting wages of $10 to $20 a day, and the "war babies" and the other business enterprises of the country were making fabulous profits out of war-time prosperity. Was that fair to us? It was not, but on the other hand whole groups of industries such as the railways and the public utilities made practically no profits; the very large salaried class was worse off than before the war; those living on their incomes saw the purchasing power of that income diminish almost to the vanishing point. Would it be fair to add to the burden these have already borne in a futile effort to equalize matters by a soldiers' bonus? Two wrongs cannot make a right. It is utterly and entirely impossible ever to approximate justice as between those who suffered in the war and those who made a gain from their country's distress. The attempt would only make fresh injustice and greater inequity.

REVIEWS OF BUSINESS BOOKS

THE FEDERAL SERVICE

By Lewis Mayers. xvi, 607 pp. D. Appleton and Company

Reviewed by F. P. Pitzer*

It is appropriate that a book having to do with the government should contain an army of facts and be bound in navy blue. Such is the volume before me, with gilt top and containing about six hundred pages. It is appropriate, too, that this mass of useful information should proceed the announcement that Herbert D. Brown's Bureau of Efficiency has classified every government job, for in his book "The Federal Service," which is a study of the system of personal administration of the United States government, Dr. Lewis Mayers informs us that there are approximately 757,095 employees in the administrative and executive services of the federal government—and then some.

Dr. Mayers has spared no pains in giving to printed literature an array of useful information, and in bringing between two boards facts which heretofore required a search through many volumes on account of their variety of subject. To administrate to three-quarters of a million men and women scattered in all directions of the compass and performing work as different as the Siamese twins were alike, is a task the enormity of which can only be realized by those engaged in this line of work.

When one reflects upon the diversity of the occupations in the service and then finds upon investigation that each functions successfully from a central control, one cannot help wondering how such a machine can be organized without becoming unwieldy and cumbersome, how the personnel at a far distant point can be administrated as thoroughly as the one near at hand. But Dr. Mayers, in a very clear way, without waste of words, tells you in his book how this is done and the Institute for Government Research can feel proud of this latest addition to its library.

To give you an idea of the diversity of occupations we find in the list such titles as superintendents of Indian schools, botanists, chaplains, curators, fish culturists, geographers, geologists and paleontologists, inspectors of steam vessels, musicians, nurses, observers of the weather bureau, internes, masters, mates, pilots, captains, pharmacists, surveyors and levelers, zoologists, editors and compilers, interpreters, and so on through six groups covering executive, professional, technical, and scientific, clerical, mechanical, subclerical and manual labor, and miscellaneous.

The book is made up of two parts and sixteen chapters with an appendix and a refined index, and one becomes interested immediately when Dr. Mayers, right in the beginning, tells us about the elimination of politics from the executive civil service, for we realize and our granddads and our great-granddads realized that the federal personnel problem, like the problem of any public personnel system is both a political and an administrative one, and to our mind because politics has such a weakening influence makes it all the more necessary for a strong administration policy. It is my contention that the government will never reach a high point of efficiency in any administrative problem until politics plays a lesser rôle in its administrative affairs. Many assume, particularly the politicians, that in the federal service the administration of personnel matters is not playing as intimate a part as heretofore, but this is not so. This branch of the government is too big an opportunity for politicians who must make good on promises, and that is the reason we find in the Washington service,

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clerical and otherwise, so many human tombstones to political favoritism.

I sincerely trust that every politician will read the volume mentioned above, the first part of which deals with the measures necessary to effect the complete divorce of the personnel system from politics, and the second with the problem of personnel administration proper. We are strongly of the opinion that as well as Dr. Mayers has outlined, in a practical way, the application of the common-sense methods to government administration, it will be impossible to shut out therefrom political influence. In every administrative policy introduced the objective must not only be to eliminate politics but to build up policies which will keep it eliminated.

It requires courage to say all of the things Dr. Mayers puts forth in the first part of his book and it is gratifying to see that he is ready to back up his convictions, and one should read this intensely interesting volume for no other reason than to become acquainted with government procedure in affairs of personnel administration.

We feel that we must quote a portion of the first part of this book. Of course one can turn to almost any page of it and find something of interest, but the following must suffice, and we congratulate the doctor on his frankness of statement and our only regret is that a man who can carry on such a thorough survey should have left the Institute, for we are sorely in need of a pen as forceful as his so that all may read and carry on to a successful end. Dr. Mayers says:

Pernicious as the appointment of the directing personnel is from any administrative standpoint, it is especially baneful in its effects on personnel administration. The political appointee, however able an administrator he may be in general, is seldom able to administer personnel matters as effectively as the permanent non-political officer. The reason is that, not having himself served in the ranks, and made the service his life work, he finds it difficult to put himself in the position of the employee, and indeed not infrequently does not think it necessary to do so. It is undoubtedly largely on this score that the failure of the federal personnel system to develop along advanced lines, even within the area where Congress has permitted the President and the departmental officers wide latitude, is to be explained.

The evil results of the political selection of subordinate employees need only be mentioned to be recognized. Looked at solely from the standpoint of the personnel system, such selection means inefficient service, improper control by the heads of the service through inability to remove or demote those appointed for political reasons, unfairness in promotion, advancement, and the like, and the weakening of the morale of the non-political personnel, which follows as a necessary result.

In presenting the evil results which flow from political selection, and particularly when attention is directed to a specific case or to the case of a specific individual, it is easy to get the impression that the evil done in that particular case is slight; especially is this so if the position to which entrance is thus given without competition or other test of merit is one of minor importance. It must always be remembered, however, that one who enters service through political influence quite frequently, as is indeed natural, secures much more rapid advancement in the service than do his or her associates who have entered by the competitive route and have no political or other influence to assist them in their efforts for promotion. The influence of political assistance thus projects itself far beyond the mere entrance gate and is likely to endure throughout the entire service history of the political appointee as a factor making for justified resentment and discontent among non-political employees.

The measures which may be taken to eliminate politics from initial selection, and, in general, to effect the divorce of the personnel system from politics fall into two distinct classes. In the first class are those which limit more or less completely the discretion of the administrative officer in matters of personnel, substituting for such discretion methods of a mechanical or formal character. Here the effort is to prevent the abuse of administrative discretion for political purposes by destroying that discretion in greater or less degree. In the second class are those measures which seek to prevent administrative officers and employees from undue political activity and conversely to prevent politicians outside the administration from attempting to influence the action of the administrator in personnel matters. Here the attempt is not to limit administrative discretion but to protect it as fully as possible from contact with political influences.

Abstract theory would seem to demand that, so far as practicable, reliance be placed on measures of the second class; for the limitation of administrative discretion is plainly in itself an evil, to be endured only because it is a less evil than the use of that discretion for political ends. Experience has proved, however, that whatever

the value of measures of the second type, the chief measure which must be relied on to effect the divorce from politics of a personnel system which has long been wedded to politics is to substitute for administrative discretion in selection a formal system of selection, preferably based on open competitive examination. The institution of such methods of selection, therefore, has come to be accepted as the characteristic and central measure of any program to cleanse the public personnel system of political influences.

And in the chapters which follow much attention is given to this subject. This part of the book also reviews the question of removals or dismissals which, as every personnel man knows, is closely allied with the question of selection and when we consider how administrative discretion in the government is limited in this respect, you can well imagine that to present a proper solution is quite difficult.

The second part of the volume discusses the specific aspects of personnel administration in the federal service and one meets chapters on "The Classification and Standardization of Positions and Salaries," "Selection by Promotion from Within versus Recruitment from Without," "Methods of Selection from Within, Reassignment and Promotion Recruit Methods, Some Basic Aspects," "The Maintenance of Individual Efficiency," "Working Conditions, Employees' Organizations, and Committees" and other matters, all of interest to the man who dabbles in personnel or employment in his organization. I do not think it is the book for those who have not as yet centralized these functions. There are books containing fundamentals more refined for the novice, but if a library is maintained on books having to do with humanity and its progress, Dr. Mayers' book should be added.

ACCOUNTING PRINCIPLES

By Spurgeon Bell, M.B.A., Professor of Business Administration in the University of Texas. 482 pp. The Macmillan Company

Reviewed by Anthony B. Manning*

To quote the author "it has been the aim in the preparation of this book to present the principles of accounting in their relation to business management" and while a "free use of illustrative solutions of problems and exercises" has been made yet it can only be considered as a students' textbook.

The volume of material used for practice data at the end of each chapter would seem to overburden the student with too much drudgery, but while it is recognized that adequate drills are necessary to bring out the point in the text, this should be kept down to a minimum.

The book is to be commended for going right into the subject at the start eliminating the usual early history of accounting and taking up the balance sheet as well as the income and expense statement together with the general ledger accounts and their relation thereto, all of which is covered in the first three chapters.

The departure from the usual form of trial balance is unique (page 15) in that the statement, instead of being referred to as a trial balance and listing the balances of the accounts under the headings of Dr. and Cr., is called a "List of Assets and Expenses, Income and Liabilities" and the account balances listed in two separate columns called "Assets and Expense Items" and "Liabilities and Income Items." This is surely presenting the subject from a common sense point of view which tends to develop the student along the lines of "How" and "Why" instead of along the lines of "How" only.

Unfortunately the Merchandise account, containing purchases at cost, sales at selling price, is still retained in the early part of the book with explanation as to the op-

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eration of the account. This account when used to contain purchases and sales, the former at cost and the latter at selling price, also includes the return purchases and sales so that before the closing inventory is recorded the total of the debit side of the account containing purchases and opening inventory at cost as well as the return sales at selling price, cannot be given a logical name other than the total debits, which is not very enlightening. Likewise the credit side of the account with sales at selling price and return purchases at cost does not improve the situation any. As no mention is made of separate accounts for return purchases, return sales, allowances on purchases, allowances on sales, in this section of the book, then it must have been the intention of the author that these elements are included in the Merchandise account, yet according to the explanation of this account the total of the debit side represents the cost of the goods available for sale and the total of the credit side represents the total sales (page 30) which, to say the least, is very misleading.

It may have been the intention to purposely eliminate these elements of the transactions concerning purchases and sales in connection with the chapter on "Accounts, Their Relation to Statement," yet the inclusion would surely present the subject more clearly and eliminate the possibility of the student forming an erroneous conclusion, which in all probabilities will be hard to eradicate later on.

The next eight chapters, four to twelve inclusive, deal with the operation of the General Journal, Purchase Journal, Sales Journal, Cash Book, and Ledger along the customary lines.

In connection with the operation of the journal and the ledger, periodical checking by the bookkeeper is advocated to verify the work already done. This not only seems a waste of time but is not practical, as the average bookkeeper has about all he or she can do to keep the books posted to date, without resorting to checking all over again. It recalls to mind the saying which I think was credited to Mr. John Wanamaker, to his bookkeeper who claimed he had never made a mistake—"The dead sure man is a sure dead man," and in these days of efficiency doing the work once but correctly is what is required of a modern bookkeeper. The author recommends the following plan at intervals of once a week or once a month (page 45)—"At definite intervals, such as once a week or once a month, the posting from the journal to the ledger are checked, the work being done according to the following plan:

1. The diary of transactions is compared with the journal entries for each item. If the diary and the entries agree, they are both checked, to indicate that the transaction has been properly journalized.

2. The journal entries for each transaction are then compared with the corresponding ledger posting. If the entries and the postings agree, the ledger item is also checked to indicate that the journal entries have been properly posted.

3. The additions of the debits and credits of the various ledger accounts, as well as the calculations of the various balances are then verified, and the balances entered on the trial balance sheet.

Chapters twelve to fourteen inclusive, deal with the balance sheet and revenue statement from the standpoint of form, use, and internal analysis, the inclusion of which in a textbook of this kind is rather unusual but very helpful, and, coming in the sequence that it does, clears up many of the points that may not be clear to the reader or student. The following seventeen chapters take up in proper order the additional phases of the subject in the usual manner. Controlling accounts, consignments, partners withdrawing, liquidation of a partnership, distribution of partnership profits, organizing a corporation, changing from a partnership to a corporation, bond issues and corporation records, are taken up in this section of the book similar to the many books on the subject now in use.

An attempt is made to cover the subject of Cost Accounting in the next two chapters of thirty-seven pages. To one not very familiar with the subject, however, it would leave a rather hazy impression.

In conclusion it must be said that Professor Bell should be commended on the attempt to get away from the usual method of presenting the subject, yet the book as a whole can only be considered as just another volume on the subject.

BUSINESS ENGLISH PROJECTS

By W. Wilbur Hatfield. Formerly of The Harrison and The Parker High Schools, Chicago, Illinois. vii, 303 pp. The Macmillan Company

REVIEWED BY JOHN MANTLE CLAPP*

Business men are wont to complain that the schools are not doing their duty in the matter of English. The young employee in the office has to make continual use of language both in speech and in writing and employers and managers say that the schools fail to give him—or her—the sort of instruction in English which is practical. They feel that the rules and suggestions regarding formulation of thought which he acquires in connection with the classics of the school course do not serve him in the rough and tumble of daily life.

Progressive teachers and business men alike, however, are waking to the importance of this matter. A committee representing the Personnel Association of New York, the New York University School of Retailing, and the New York city high schools is at present making a systematic study of means of closer co-operation between the schools and business.

This book by the secretary of the National Council of Teachers of English and Editor of its organ, *The English Journal,* is a valuable contribution in the same direction. The little volume is well worth the attention of any business house which is interested in the training of its young people.

First of all it is not a book of doctrine but a book of problems. The term "project" is currently used by educators to signify a hypothetical problem designed to give the student exercise in doing something like what he would do in a real situation. The principle of educational theory which is implied in the term is set forth as follows in Mr. Hatfield's preface:

> Today we are all coming to believe that the pupil learns chiefly by solving some problem or carrying out some project of his own. Long ago we discovered that a foot of practice was more effective than a rod of theoretical instruction. Now we find that the practice itself is effective in proportion as it is an attempt by the pupil to carry out a purpose of his own; and that the theoretical instruction is most readily understood and assimilated if presented when the pupil needs it to surmount a difficulty which he has met in carrying out his purpose. In the first place, the pupil who is trying to execute his own purpose differs from the one who is merely following the teacher's direction very much as the free laborer differs from the slave; and the greater efficiency of such self-directed, self-driven effort is now unquestioned. In the second place, to offer instruction in the technique of composition before the learner feels the need for it is much like serving a heavy dinner to one just arising from sleep; it causes present distaste and later dyspepsia. The teaching process, then, takes this order: (1) Helping the learner to find a purpose suitable to the time and place—to adopt a project. . . . The essential thing is that the pupil be brought to *adopt*—not driven to endure—the project. . . . (2) Helping the learner to realize the problems and difficulties that he encounters. He may feel that he is succeeding when he is not, and even oftener he may be unable to see just where his difficulty lies. (3) Making clear the principle which will solve the problem or surmount the difficulty.

To carry through such a scheme is of course a much harder undertaking than the compilation of the old-fashioned type of textbook. You must know with certainty what can be left out, and in what order the essentials must be presented, and you must know also how to give your suggestions and directions pleasantly and constructively. Mr. Hatfield has succeeded very well with his difficult task. Here and there, of course, the tone is different from that which would be used in addressing business readers. The preface and the first chapter of a business book would not begin with such formal terms of address as "Dear Fellow Teacher" or "Dear Student;" nor would the author express his feeling of the importance of the period as a punctuation

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mark in such enthusiastic terms as the following:

> Crown the period king of the realm of punctuation! Pay court to him first. If necessary, neglect all others to gain a footing with His Royal Highness, the period.

As an old teacher, however, Mr. Hatfield knows that the natural gait of the adolescent is the hop, skip, and jump of figurative phrase—not the heavy plod of literal statement, and he has managed very successfully to make his instruction serious without having it too formal and dry.

To the reader who studied rhetoric a generation ago the arrangement of the little volume will appear strangely unconventional and simple. The 300 pages fall into two general sections, Chapters I to IV and Chapters V to VIII. The first half of the book presents a series of situations which call for particular ways of handling. Chapters I and II—"Occasions for Talking" and "Occasions for Writing" merely present a variety of problems without suggestions as to their treatment. In Chapters III and IV—"What to Say" and "How to Say It"—problems are suggested more fully, with a discussion of what is needed for their solution. Incidentally a number of points regarding the technique of speech and writing are brought to the student's attention. This incidental method of instruction is much more useful than the formal methods of a generation ago, although it necessitates wide and thorough knowledge on the part of the author.

The second division of the book gives the indispensable rules and drill matter. There are 50 pages on "Practical Grammar"—special cases followed by rules. There are 20 pages on "Punctuation," and 10 on "Letter Forms"—which seems rather too little. The 50 pages on "Spelling" seem, on the other hand, rather too much for a book of this kind, but no doubt Mr. Hatfield as an experienced high school teacher knows his pupils' weaknesses.

One striking feature of the book is the prominence given to spoken English, which is considered first and analyzed in detail. Most books on business English shy away from the matter of speech. They give eloquent exhortation and pass on to "business letters" or something else that is easier to handle. The truth is, these authors do not know much about instruction in talking. The fact that Mr. Hatfield's treatment of talking is much fuller and more detailed than is to be found in any previous work of the kind is a good augury for the future. Notice the sort of criticism by other members of the class, which Mr. Hatfield would encourage.

Such talking problems as the following are bound to be of help to the student in any line of work which he may enter:

> 4. Perhaps you have felt, as so many do, that there is some mystery about "commerce" and that "business" is quite removed from the lives of most high school boys and girls. Have you realized that buying the groceries for mother, selling tickets for your church or school entertainment, or earning "pin money" by doing odd jobs is just as commercial as selling the groceries or writing some salesman's letters for him? To think and talk about such commercial experiences as you have had is one of the best means of getting that understanding of business principles which you will some day need so much. Come prepared to tell a story, of your own experience if possible, that might bear one of the following titles, *or* one *similar* to them: My First Earnings, The Time I Lost the Money, A Poor Bargain, Short Change, A Business Venture of My Own (Did you ever sell lemonade or hold a penny circus?), The Time I Got My Money's Worth. *Criticism.* What made the story worth telling? How could the narrator have made it more interesting or more informing?
>
> 10. Doubtless to you, as a young student of business, selling seems the most important thing, but not a thing which you can study directly. Yet you have listened to the lace peddler or the coffee solicitor at the back door, the fruit vender in the street or alley; and you have probably been the subject of all the salesperson's arts when you were buying a suit. Tell the class about some such sales talk that you have heard, about a successful one if possible.
> *Criticism.* Did the speaker address his audience *directly?* Had he observed keenly and thoughtfully?
>
> 33. This is to be a sort of contest in description. Describe something to eat or wear in such a way as to make others want it. To do best, give your whole thought to the desirability of the article you are describing, for in this way you will be likely to appeal strongly to the senses of smell, taste, and touch. There is to be no interruption or comment until all in the compet-

ing group—which may be the whole class or any predetermined part of it—have spoken. Then the members of the class will indicate by a show of hands which of the things described appealed to them most strongly.
Criticism. Recall particularly effective phrases and details. Compare the arrangement of successful and unsuccessful descriptions. Mention any grammatical errors which distracted your attention from the description itself.

39. The telephone is one of the most important instruments of modern business, and yet to use it effectively requires both tact and intelligence. Prepare to impersonate one of the following individuals at the telephone: the ticket seller of a theater answering a request for a reservation; . . . a grocery clerk taking orders; the office girl answering a call for the doctor who will not be in for two or three hours; a real estate agent answering a request for detailed information concerning an apartment for rent; the information clerk at the railway depot answering an inquiry about trains for New Orleans; a person who has advertised a second-hand automobile or victrola answering an inquiry for particulars; a department-store clerk taking an order for stationery which has risen greatly in price; the lawyer's stenographer whose employer is out of town answering a client who has very urgent business.

43. Have you ever tried to dictate a letter? Not so easy as "talking," but more fun. The chief difficulty is a certain excitement, somewhat like the "buck fever" which causes a hunter to stand motionless while the game he has been tracking all day passes in full view at easy range. You can easily wear off this strangeness in a few attempts. For the class exercise choose some letter which you wrote at least a month ago, fix the ideas clearly in mind, and then talk away. You will be assigned a real stenographer. Practice with a chum before class if you wish, but *do not memorize* your letter.
Criticism. Try to look at the transcript of your own dictation as you would at a letter you had received. Perhaps the stenographer's comment upon the distinctness of utterance and the uniformity of speed will be interesting.

It must be admitted, however, that in one important particular these talking exercises miss the point. Almost without exception they are exercises in *speech-making*, addresses to the class or to an imaginary small group. But the actual occasions for talking in business are overwhelmingly occasions for *interviews*—not for speeches—for conversation between two or at the most three persons. Mr. Hatfield's book would be much better if it dealt more with conversation.

The book has a few minor defects of form which might hinder somewhat its ready use. One wonders why the many interesting "Occasions" given in Chapters I and II are nowhere definitely listed, either in the contents or in the index. Some of the photographed reproductions in the section on "Letter Forms" are too small to be readily legible. The "Language Games" and specimens of mail order ads in the appendix seem somewhat below the level of the rest of the book.

Here and there, moreover, the "set-up" of the problems shows lack of close familiarity with business technique, and the difficulty which young students would meet with in visualizing the situations of large business houses. The following, for example, would seem a little difficult for the ordinary high school boy or girl:

127. One of the letters which you must write in your capacity as credit man for Gimbel Brothers' department store is an urgent request to a neighbor of yours to pay his store bill for month before last. You are to be polite but to insist that he pay at once. Of course, the neighbor will never know what employee of the firm wrote the letter.

This problem would be better, it seems to me, if it were supposed to be written not by the credit man of a metropolitan department store but by the proprietor of a local grocery where the "neighbor" might be expected to know perfectly well who wrote the letter.

On the other hand, the book is rich in problems which present the principles of business relationships in terms of the student's own life, and that is the most valuable feature in such a text. The following exercise in condensation, for example, is quite within the range of the high school boy or girl.

125. As secretary to Dr. Bitting, who is out of town, you have received this night letter:
"2234 SI WT 48 NL

Oconomowoc Wisconsin January 13 1924

Reverend Wm S Bitting
3236 Laclede Ave St Louis Mo

Must have you for lecture course January twenty nine to replace Conwells Acres of Diamonds it

sold whole course we must have something good to satisfy people for old times sake help us out start midnight Wednesday get home Saturday morning will pay two hundred fifty and expenses

Herbert Withers
12 45 Am"

You cannot decide for him, you know he will be on the train and out of reach of a telegram after noon today, and the night letter is too long to repeat at day-message rates. Write the necessary telegram.

It would be too much to expect perfection from the first ventures into so new a field. Perhaps for full success we need collaboration, a business man and a teacher working together and correcting each other's errors of perspective. Mr. Hatfield is to be congratulated on having carried his pioneer line on the whole with such clear sight and sound judgment. It is to be hoped that he may be followed by many others.

TIME STUDY AND JOB ANALYSIS

By William O. Lichtner. xvii, 397 pp. The Ronald Press Company, New York

Reviewed by Professor Joseph W. Roe*

This book aims to explain time study and job analysis in simple non-technical terms, and it does so without any sacrifice of value. One naturally compares it with Merrick's book on the same subject and this one takes place with that as one of the standard reference books on time study. Merrick is more technical in his treatment. His applications and examples are confined almost solely to the metal trades, to the machine shop, foundry, and forge shop, and he covers this particular field much more thoroughly than Lichtner. Lichtner, on the other hand, draws his examples from a wide variety of industries, ranging from shining shoes, to cloth and paper manufacture. He is much fuller in his treatment of the conditions which should precede and surround standardization work.

After four chapters on the general principles of job analysis Mr. Lichtner takes up the organization of a staff to carry out such work, not merely a temporary one required for the period of installation but a permanent staff *within* the plant organization. The main portion of the book is devoted to the technique of the establishment of standards—the preliminary study necessary, determination of elementary times, checking and analysis of these times, the establishment of rates, drawing up of instructions, and the applying and perpetuating of the new standards.

The style is direct and free from any trace of the academic, and the language such as would naturally be used in a series of conferences between executives who were formulating a standardization policy and planning the details. This makes the book singularly readable, a rare merit in a book of this type. In connection with the chapters on the technique of time-taking, it is recommended the reader obtain if possible the discussion on "Stop-Watch Time Study; an Indictment and a Defense," reported in the Bulletin of the Taylor Society, June 1921, in which the stop-watch method described by Mr. Lichtner is sharply criticized by Mr. Gilbreth, the leading proponent of photographic method. This discussion brings out very clearly the advantages and disadvantages of both methods.

Mr. Lichtner very properly recognizes the importance of the co-operation of the superintendents and foremen, the education of the workmen in the new standards, and definite provision for the maintenance of these standards—three phases which are vital and yet often neglected. The book is especially valuable for its emphasis of just such elements as these. It is not the most detailed book on some of the more technical phases, but for an all-round sane consideration of time study and job analysis it is the best book available.

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WORKING WITH THE WORKING WOMAN

By Cornelia Stratton Parker. xxi, 246 pp. Harper and Brothers

REVIEWED BY M. O. TRUESDALE*

When a sane, wholesome book on the problems of the working woman appears, the optimists—and there are some—rejoice. We have become so accustomed to the college Ph. D. thesis that treats the question theoretically, and the social reformer who too often treats it emotionally, that we have almost forgotten that the working woman is just an ordinary human being who demands of life, as we all do, food, shelter, occupation, love, and some recreation. Our standards vary according to our traditions and our earning capacity, but the ultimate demands are the same.

In "Working With the Working Woman," Mrs. Parker does not pretend to have solved the problem. Her excuse for the experiment was "first, curiosity and a desire to feel a bona fide part of a cross section of the world, and to better understand the industrial end by trying a turn at what some eight million other women are doing."

She wanted to feel for herself the genuine atmosphere of the job without these working women knowing they were being investigated, and in the six chapters in which she tells of her experiences in six different types of industry she has given us the spirit of the places as well as a very intimate and sympathetic picture of the workers themselves.

In her introduction, Mrs. Parker says some employers may draw a false conclusion that workers are happy and do not want better conditions. To her the question of the worker is not a labor problem but a social problem.

These working women constitute a majority of the population and, in the long run, we rise no higher than the welfare of the majority. That there are thousands of contented souls in the congested tenement district of the East Side of New York City does not add to our social welfare. Society found insanitary conditions too costly and now cities pride themselves on pure water and a low typhoid rate. Perhaps one of the most harmful phases of modern civilization is the contentment of the average worker. It is the duty of the employers and society at large to build up a healthy, intelligent population.

Mrs. Parker believes in welfare work for it will be a long time before women organize, and it is good business to put women on a more efficient level. The dental clinic is a good investment. A person whose teeth are in good condition is a better citizen than one suffering with toothache. There should be a rest-room in every factory, and a short time allowed in the afternoon to use it. Eight hours is enough for a woman to do sustained physical work and there should be no possibility of overtime.

The opening chapter of the book sketches briefly the difference between the condition of the working woman in 1850 and today. Then, 12 hours was the average for factory work, and the pay from 15 to 18 cents an hour. After the Civil War, women ceased to go into the factories in large numbers. Other occupations were opening for them. The 1910 census shows all kinds of jobs filled by women, and the women workers in factories decreasing, which is a hopeful sign for the next generation. Women have always worked, but modern inventions have simplified her home tasks. Traditionally men should support the women, but at no time have all the men in the country been able to support all the women. There is nothing harmful in women going into industry, if industry is so organized that participation in it enriches human life, remembering always that when industry takes women from the care of young children, society and the nation pay dearly. There are many factories where the conditions are so bad that they are a menace, but there

* Formerly Special Investigator for the Government and later for several industrial concerns.

is a growing tendency to increase the welfare of human beings in industry. The author grants that in each job her part was artificial, but "six jobs, even if the result of each experience was the richest possible, are but an infinitesimal drop in what must be a full bucket of industrial education before a person should feel qualified to speak with authority on the subject of labor." The most valuable lesson she learned was a deep distrust of generalization, as it is so easy and comfortable to make statements to cover numerous cases.

Mrs. Parker's preparation for entering the field of the untrained worker was based on her knowledge of the psychology of clothes. So she purchased "large green earrings, a large bar pin of platinum and brilliants ($1.79), a goldy box of powder (two shades), a lip-stick. During the summer she faded a green tam-o-shanter so that it looked not too new; for a year she had been saving a blue-serge dress (original cost $19) from the rag bag, for the purpose. She wore a pair of old spats with a button off one which just missed being mates as to shade; silk stockings, of course, but very darned, a blue sweater and an orange scarf." Some people have to go to a masquerade to feel themselves someone else, but Mrs. Parker got the sensation by buying five cents' worth of gum and boldly chewing it in the subway.

Of the six industrial experiences four were in factories, one in a laundry, and one as pantry girl in a large hotel. Everywhere she met a friendly desire to help the newcomer, from the forelady and floor bosses down to the girls themselves. And many times she wondered at the patience of those in charge of inexperienced workers, for the labor turnover in most factories is very large. In fact it is the salvation of the factory girl that she constantly shifts from one monotonous job to another. Mrs. Parker found no typical factory girl. One quality they all possess in common: They are ready to tell you everything about themselves on short acquaintance. The wages were about $14 a week and the hours from 7.45 to 5.30. In some places where an hour was allowed for lunch the closing time was 6 o'clock.

In the chocolate factory, her first job, she found cleanliness, but the long hours of standing brought an almost unbearable strain on the feet. The brass factory had all the horrors of the East Side: Lack of fresh air and light; and the workers were covered with filth and oil for which the management supplied no towels or soap. Among the candy workers there was no class feeling, no ideas of grievances, no ambition over and above doing of an uninteresting job with as little exertion as possible. The brass workers were content to stay on a foot machine and mechanically kick it 6000 to 8000 times a day rather than learn the more difficult occupation of running a power machine. Mrs. Parker soon desired to be promoted to the power machine and her fellow workers could not understand why she should want to try new work.

In the laundry she found good feeling and much singing at their work among the girls, many of whom were colored and inefficient. Here again the long hours of standing left the girls too tired at night to do anything but go to bed.

The dress factory drew a higher type of worker, as some skill had to be acquired and concentration prohibited much talking. Some of the old hands earned as much as $20 a week, the average girl dressed better, and certain class distinctions were made, but the working conditions were bad.

Her last factory experience shows the contrast between the average New York factory and one in a small town run on the partnership plan. Writing of The Bleachery at the Falls, she says, "it is a factory in which the social reformer would rejoice, for here there was real light-heartedness and joy in the work." Many of the workers were old and had spent their life in the factory, which was the only industry in the town. It was like a great family; everyone knew and was interested in everyone else. The workers were all Italians or Americans. There was much laughter and giggling which was never curbed by the good-natured foreman in charge and it was significant that out of the 18 similar industries in the country The Bleachery was one of the two at that time—soon after the war—running full time.

Under the partnership plan every operative was allowed a week's vacation with pay and all time over 15 minutes of tardiness was deducted from the vacation, just as time off without sufficient reason meant less vacation. Yet every one was satisfied. When orders piled up girls willingly worked overtime, for orders meant more profits to be divided fifty-fifty between labor and capital.

Once a month there was a meeting of the Board of Operatives and the management. These representatives were elected by secret ballot from the operatives in eleven different departments of the mill and were paid $2 for attending the meeting. Any operative might go to the meetings but had no vote.

In her last place as pantry girl which was, more strictly speaking, working with the working man, Mrs. Parker again received every consideration from her fellow workers and found it easier than the other five jobs, which sorely taxed her although she claimed health and strength. If she felt the strain, what must it be upon the average factory girl, often fighting without a physical chance from birth?

In all six experiences the writer has caught the feel of workers—the human side of little Pauline, the Italian who spoke no English; Tessie, the German, whose man brought home all his money regular until he broke his wrist and had to lay off; old Mrs. Reilly who wanted to marry everyone off, but got enough with the one man she married; Miss Cross the forelady in the laundry who had begun as a hand-ironer, who was neatness personified, and could have held her own socially as to looks, but whose grammar would have betrayed her; Louise who went to the movies with her husband every night and twice on Sunday; and Lena whose one topic of conversation was the "dopes she had vamped."

Of these six industrial experiences, Mrs. Parker says in conclusion:

> They have made me feel that the heart of the world is even warmer than I had thought—folks high and low are indeed readier to love than to hate, to help than to hinder.
>
> Industrial peace must come not as a result of the balance of power with a supreme court of appeal in the background. It must come as the inevitable by-product of mutual confidence, real justice, and constructive good-will. We must recognize that we are all brothers under the skin if we would bring about an increase in understanding between human factors in industry. And what industry needs more than anything else, although it also needs experts in scientific management and mental hygiene, is translators of human beings to one another. Given these translators the reforms will follow.

"Working With the Working Woman" should be read by every employer of labor and serve as a textbook for every social reformer, for it sounds the human note without which no understanding between capital and labor will ever be reached.

PRINCIPLES OF PUBLIC SERVICE ADMINISTRATION

By Arthur W. Procter. xi, 244 pp. D. Appleton and Company, New York

Reviewed by Leon R. Whipple *

This volume might well be called the code of modern ideals in civil service administration. It deals with the general principles which must ultimately be applied to lift public service out of politics, to encourage a better class of persons to enter public service, and to promote efficiency in the conduct of governmental business. It is especially directed to the members of our national, state, and local legislative bodies who are so often called to face the difficulties of proposed reorganizations of their personnel methods, and also to the superior administrative officers who have to apply just principles to their conduct of public service employment.

Yet the study is not technical, but gen-

* Member of the Journalism Faculty, New York University, New York.

eral; it deals with principles rather than with details of procedure. Therefore, the executive who faces the puzzles of private personnel administration will find many wise hints herein. For after all, what difference is there in getting good workers to do good work for the government, or for a private business? You may say private business is outside of politics. But is that true? Is there not the politics of foremen, of graft, of favoritism, and especially of labor, in all private affairs? We believe that some of the ideals set forth in this valuable and upward-looking book can be wisely applied to promote efficiency, justice, and decent relations wherever men work. It is certainly not too much to claim that as employee representation increases, we must find equitable and permanent methods of handling personnel problems, such as the definition of the job, the method of recruiting new employees, and standards for advancement and promotion.

We recommend, therefore, to the business executive the author's main propositions. These are, we believe, the necessity for adequate compensation, the extension of the merit system, the standardization of the job, and the erection of efficiency ratings upon which, in large measure, the recognition of faithful work must be based. Why should we not have "civil service commissions" in private business —whether personnel managers, or shop committees—to serve the same purposes as do government commissions?

Mr. Procter makes a strong claim for the extension of the merit system as the "basic requirement of progress in public employment."

> The merit system is the underlying idea of civil service legislation. It aims to eliminate personal favoritism and political preference, and to establish impartiality in the conduct of public employment. It accomplishes this end, in the main, by throwing safeguards around the appointment, promotion, and removal of public employees. . . . It requires that removal shall be made only for *bona fide* reasons, and after the employee shall have been given a fair hearing.

He declares that the system is applicable to a great many more positions in our governments than it has ever been applied to.

Perhaps this failure, plus inadequate pay, explains why, as the author declares, the civil service is not looked upon with such popular esteem in the United States as it enjoys in European nations. He is very frank about remuneration: "The rates of pay offered in public employment at the present time are not, generally speaking, proper or satisfactory."

The bulk of the treatise is devoted to the remedies for these conditions. First is the right kind of a civil service commission, properly organized, and with adequate power. The ideal form of commission is outlined in the Standard Civil Service Laws for state and cities, drafted by the National Civil Service Reform League, and printed in the appendix of the present volume. Next, and in considerable detail, with much helpful data in rules and forms, comes the problem of standardization. This is:

> . . . the necessary foundation of a business-like and equitable administration of public employment. Without a standardization of the terms and conditions of employment, the agencies charged with the control of civil service personnel have on their hands a problem impossible of solution. . . . It is the positive phase as contrasted with the older negative phase, which was concerned mainly with the imposition of checks and restrictions on administrative authority.

The efforts of Congress at a standardization program, and an outline of such a program are valuable parts of this chapter. The next one deals with the "Conduct of a Standardization Inquiry" and reproduces some of the blanks used. This is the most exhaustive and perhaps the most useful section of the entire book. For standardization and classification, analysis of the positions offered is clearly basic to all problems of wages, promotions, and the like. The remaining part of the book is given to what may be called personnel problems—how to get men, how to train them, how to rate them for efficiency, and also how to handle advancement and promotion.

This is an authoritative and complete survey of a problem that becomes increas-

ingly important as governments extend their functions, and so extend their personnel problems. The author is particularly well qualified to speak. He has studied personnel administration as a member of the staff of the United States Commission on Economy and Efficiency, of the New York Bureau of Municipal Research, and the Institute for Government Research by whom the present work is sponsored. The conclusions are by a man who knows from experience, and they represent the most advanced ideas on a complex subject.

REVIEWS OF BUSINESS PAMPHLETS

Cost Accounting in the Canning Industry. By E. J. Coleman. National Association of Cost Accountants, 130 West 42nd Street, New York City.

Cost Accounting in the Canning Industry is rather difficult because of the seasonal character of the industry. This article leaves little to the imagination of the reader inasmuch as the principles outlined in most cases are explained by illustrations. Cost accounting for the prime items allocated to the different products by varieties is first taken up followed by an explanation of how the split between the different size containers are brought about as illustrated in the case of raw material and labor. He advocates the distribution of non-productive labor upon the basis of productive labor. The direct or factory overhead accounts are listed. These are distributed according to either the percentage or the case basis. Both of these bases are clearly illustrated with figures. The administrative and fixed selling expenses are listed, the bases for distribution being explained. To the factory cost is added the indirect overhead, the result representing the cost of packing the products and piling them in the warehouse. From this point on the procedure changes from costing on a pack basis to costing on a basis of shipments. The factory office procedure is described in considerable detail.

Style Book. The H. W. Wilson Company, New York City.

Executives wanting a serviceable manual on abbreviations, capitalizations, division of words, punctuation, etc., will find this second edition of the rules governing the style used in setting the publications of The H. W. Wilson Company extremely helpful.

This new edition includes a brief section on alphabeting. Its compilers have recognized the fact that no style book can be entirely free from errors and omissions and so the left-hand pages have been left blank for the inclusion in ink of additional matter and corrections. By "corrections" is meant any change in the style followed by The H. W. Wilson Company.

Librarians of plant libraries, editors of employees' magazines, etc., will not err in matters of good style if this booklet be followed.

Distribution of Operating Costs of Centralized Power Plants at Low Capacity. By Frank B. Wolfe. The National Association of Cost Accountants, 130 West 42nd Street, New York City.

This pamphlet deals with one phase of the distribution of costs under abnormal conditions, namely, operating costs of centralized power plants running at low capacity. One of the most important and pressing problems of cost accounting today is how to handle costs when they are above normal due to this period of business depression. This general subject is exhaustively treated in the 1921 Year Book of the National Association of Cost Accountants, 50 pages of the book being devoted to this subject.

In order to realize the significance of the problem that the author deals with, we quote the following in his introduction:

> During the war period many important manufacturing companies throughout the country built large power plants to serve two or more local manufacturing units, conveniently situated nearby, or which it was contemplated would be built under expansion programs so numerous during that period. Industrial depression came

along in many cases in the fall of 1920, with the resultant necessity for decrease in production, and consequent reduced requirements for the product of the power plants, i.e., steam for various purposes and electrical energy. Such organizations now find themselves in possession of perhaps efficient but nevertheless expensive power plants, which have a capacity far in excess of present needs or those of the immediate future. The cost per unit of power of such power plants when operating at 50 per cent or less of capacity, frequently exceeds the price of corresponding power purchased from public utility corporations. Many small concerns are now buying power from public utilities. Without discussing the judgment prompting the erection of such power units, some large and ably managed companies now find themselves in the rather difficult situation mentioned above. Competition promises to be keen during the ensuing few years. Manufacturing costs undoubtedly must be reduced to the lowest point, but nevertheless they must be accurate. Power cost usually is an important element of manufacturing overhead. It is true that under most circumstances, it would not be reasonable to suggest the disuse of such power plants. Having in mind the requirements of a dependable cost accounting system during periods of extremely competitive market conditions, the solution of the problem must be largely a matter of efficiency and of proper accounting until business conditions again reach normal. The excessive cost of operating such power plants should be absorbed through operations showing profit and loss it is true, but in such a manner as not to load manufacturing costs of these plants used as a basis for setting selling prices.

He states that a fixed rate for power and steam should be established upon the basis of normal production and that each plant served should be charged on these fixed rates in accordance with consumption as determined from meter readings. The methods of handling the undistributed amounts which represent the difference between standard power costs and actual power costs are described by the use of a number of hypothetical examples. In this connection erroneous methods of handling power costs are explained. How actual rates are determined is also brought out.

Results shown by an analysis of the illustrations are summarized.

The principles outlined in this article, when practical, could be applied with equal justice in the departmental distribution of power of a single manufacturing plant for purposes of dependable cost accounting, or for that matter, to distribute the expense of any department or unit whose service definitely can be measured.

Side Helps to Selling. The American Art Works, Coshocton, Ohio.

More common sense on selling is put into this little sales manual than one finds in most bound volumes on salesmanship. Written primarily to aid the new man in particular, it contains helpful suggestion for the seasoned salesman.

The anecdotes which are used by way of illustration drive home the points in such a way that it is impossible to forget the "side helps" suggested for the salesman.

Whoever compiled this pamphlet knew his business. He ought to write a book for public distribution.

It's the Way It's Written. By Henry J. Smith. *The Chicago Daily News*, Chicago, Illinois.

The editor of an employee's magazine will find this booklet extremely helpful in the preparation of copy for his publication. Those connected with the advertising department of a manufacturing plant will also find it helpful by way of suggestion even though the pamphlet is designed primarily for those who work on daily newspapers.

An interesting comment may be made in passing where reference is made to Shakespeare, who it is said, if he were living today would be a great advertising man. Shakespeare knew how to appeal to human nature.

Executives who want a faithful picture of conditions in Russia will be interested in the following:

> There are no boating songs on the Volga this year.
>
> The balalaika (the Russian guitar-like instrument) is not ringing from the few boats which are floating along this once mighty river. Its shallow waters are affording a poor avenue of escape from the parched grain fields which mock the peasants to whom they formerly yielded abundant bread.
>
> Pawnbrokers have long since received the balalaikas in exchange for rubles necessary to buy food for the starving families.
>
> Samovars no longer sing merrily on the hearths of the peasant cottages. They, too, have been exchanged for bread.

Together with the family ikons and the bright brass candlesticks that once adorned every mantelpiece, they are exhibited in the second-hand shops of villages and cities while their former owners are huddled together in miserable camps along railways and rivers waiting for somebody to take them to a land of food.

Priests who are as miserable as their parishioners have set up altars in the wayside camps and are burying the dead and praying for the half-dead who kneel submissively before the cross and intone their petitions to heaven at sunrise and sunset.

Fortunately, the sun does not fail them often. The autumn has been dry so far and the glorious Indian summer has made their lot more tolerable than it will be when autumn rains add to the misery of the unsheltered, poorly clothed hundreds of thousands.

A few families are still floating down the river in frail rowboats stacked high with children and battered household utensils.

The conditions are about as bad down the Volga as they are here, but the more restless refugees say they feel better if they keep moving. Here and there a family still has a horse or an ox which has managed to live on parched stubble, and is dragging along behind the rickety wagon until the time when it shall drop dead.

Cemeteries surrounding the churches which line the entire course of the Volga are crowded with refugees.

The drought and the grasshoppers have robbed them of bread. Their prayers have been of little avail. Their priests have not been able to get them food.

Yet they have not utterly lost hope and still devoutly cross themselves and feebly voice petitions as they slowly merge into the dust to which they are so soon to return.

Mr. Smith adds a touch of humor by translating the preceding selection into the newspaper jazz given in the following paragraph:

On the broad, gleaming bosom of the stupendous Volga as I learn and hereby cable exclusively after unheard-of privations, there are no boating songs ringing out as of yore. The gleaming samovars never again will utter their joyous ditties from the broad hearths of the huddled cottages of the once wealthy and prosperous peasants. Once, many months ago, prior to the advance of the grim reaper, these samovars, together with the magnificent family ikons and the gorgeous brass candlesticks adorned the mantelpieces of all homes in the fashionable residence districts of this the second largest town of the province of Samara. Now, come to a lowly estate, they are on exhibition in the fly-specked windows of the second-hand stores of the villages and cities, all of which I have recently visited in my capacity of special commissioner. The former owners, men once prominent millionaires, women once flaunting their beauty in a hundred salons, and children once ruddy-cheeked, swarm like flies in miserable camps along the interminable railways and the vast rivers waiting in terror and desperation for the arrival of that succor which shall mean to them transportation to a land of peace and plenty.

In conclusion, the executive might do well to pass a tip to the editor of his industrial magazine to write and get a copy of this booklet. It may be obtained gratis upon application to *The Chicago Daily News*.

BRIEF ANNOUNCEMENT OF NEW BUSINESS BOOKS

A Century of Banking. By Henry Wysham Lanier. George H. Doran Company.

Production Engineering and Cost Keeping for Machine Shops. By William R. Bassett and Johnson Heywood. McGraw-Hill Book Company.

Scientific Selling of Advertising. By Arthur Dunn. Harper and Brothers.

Human Factors in Industry. By Harry Tipper. The Ronald Press Company.

Practical Accounting for General Contractors. By H. D. Grant. McGraw-Hill Book Company.

Manhood of Humanity—The Science and Art of Human Engineering. By Alfred Korzybski. E. P. Dutton and Company.

The Founders of Political Economy. By Jan St. Lewinski. P. S. King and Son, Ltd., London.

American Commercial Credits. By Wilbert Ward. The Ronald Press Company.

Public Opinion. By Walter Lippmann. Harcourt, Brace and Company.

The Advertising Man. By Earnest Elmo Calkins. Charles Scribner's Sons.

CHRONICLE AND COMMENT

WITH OUR EDITORS

Almost from the inception of the magazine, James M. Lee, Director of the Department of Journalism, New York University, has carried the direct editorial responsibility for *Administration.* This involved special arrangements for the proper care of Mr. Lee's university work, and could, therefore, be but temporary. Accordingly, at Mr. Lee's request, with the August number of *Administration* the responsibility shifts to other shoulders.

While Mr. Lee lays down the direct responsibility for the magazine, it is pleasant to state that he does not leave its editorial staff, and that *Administration* will still benefit by the technical skill, the trained experience, and the wise counsel from which it has already profited so greatly.

* * *

Beginning with the September number of *Administration* H. Parker Willis, editor of *The Journal of Commerce*, New York City, will contribute each month a financial review touching on the more important current happenings and conditions which do or may affect business, and particularly business finance. Dr. Willis is a writer of international repute, and an authority on financial matters, and his monthly review should be of distinct and material value.

EXECUTIVE INITIATIVE

Editor Administration:

I am very anxious to secure any available data pertaining to a suggestion scheme for officers or executives of an organization. That is, a plan that will encourage and foster initiative on the part of executives of various departments. We have a cash prize suggestion scheme for employees which has proved very effective and we would like to inaugurate a plan for executives that would bring the same result, but that would be different in construction.

* * *

The subject is one on which but little has been written. Can any reader of *Administration* offer suggestions?

BUSINESS ENGLISH FROM THE VIEWPOINT OF THE BUSINESS EXECUTIVE

An investigation, made at the suggestion of representatives of the New York City schools, is now in progress to ascertain the preparation which business men desire for their employees and to determine how far the present work of the schools meets their requirements. The Commercial Education Research Committee, composed of both teachers and business men with B. A. Heydrick of the High School of Commerce as chairman, has this investigation in charge and has gathered much information that is of both interest and value.

The following report on business English was prepared for this committee to present the views of the R. H. Macy Company, and is printed here by permission. It gives the viewpoint of the business executive. In doing this it complements the article by Professor Spaeth of Princeton in the July issue of *Administration*,[1] "The Place of English Studies in Commercial Education," which emphasized the importance for the student of business of the discipline afforded by the study of English, giving the scholastic viewpoint.

As stated in the introduction, the report "is based primarily upon interviews with business executives" and as showing the value of their opinions it states: "There is one dominant virtue in an opinion given by a business executive—it has poise. The opinion of the executive is tempered by experience, trial, punishment, and suffering. In business a man pays hard for his hasty opinions; they cease, consequently, with the years of experience, to be hasty."

Some minor matters not necessarily connected with the general discussion have been omitted from the report—otherwise it is printed practically as submitted.

* * *

What does the business executive desire in the use of English?

Generally, the opinions of the executive are these:

[1] See page 41.

1. A business organization can function on a minimum of language, providing that the language is simple and correct. *Economy* is the watchword of business, not only in commodities and household, but also in language.

2. Too frequently economy becomes a sort of stereotyped phrase. One can be economical in language and still maintain the element of originality.

3. In business, language is not used for its own sake, as it is often used in art. Language in business should have a purpose. And it should suppress itself until it does have a purpose. The use of language in business is more akin to its use in science than to its function in art.

4. In business, language should be preferably dynamic. Slothful phrases however rich in thought are tedious.

5. On the whole the business man makes no distinction between "English" and "business English." Let the schools teach "good English" and he will be satisfied.

Is the business man satisfied with the English of the high school student at present? Although he admits an improvement in the last few years, he is still emphatically dissatisfied with the situation. His criticisms are as follows:

1. There is lacking in the language of the high school student, particularly in his writing, spontaneity, originality, and individuality. As the business man reads the letters addressed to him he is inclined to ask—"What happened to the personalities of these people? Why are they rigidly uniform in their behaviors and manners?"

2. The high school student is too frequently poor in his grammar. Specifically, he does not understand moods, tenses, relative clauses. He does not understand how to allocate a clause or a phrase to its proper antecedent. He does not know how to construct a sentence in itself or in its relation to other sentences.

3. In too many cases the vocabulary is limited, particularly in the Anglo-Saxon words of the language; in the uses and meanings that come from the knowledge of synonyms; and in the vivid contrast of ideas that have to be expressed in antonyms.

4. The tendency on the part of the high school student in approaching the business executive is to express himself as ornately and elaborately as he can through a medium of involved phrases and big words. The business man desires simplicity of language because he prefers economy of language and he thinks that the former is the soul of the latter.

5. Expressions are hackneyed. There is an impoverishment of vocabulary. Particularly the vocabulary of good descriptive words.

The business man decides there is nothing the matter with the curriculum of high schools, judging from the syllabus. He is therefore inclined to attribute poor language on the part of the high school student to the fact that the teaching methods are wanting in intensity and concentration. The business man therefore advises a more thorough training in grammar and rhetoric. He recommends a more intensified development of what he is pleased to call "the architecture of language," that is sentence and paragraph structure.

In supplying samples of letters of application and correspondence, it should be pointed out that in making a choice for a position, English is but a minor factor because business is primarily a utilitarian institution, and applicants are successful primarily on their ability to supply the technical needs of the position. The business man is not yet convinced that the use of good English is an indication of good training. He has become so thoroughly accustomed to poor English that he is inclined gratuitously to allow it to 99 applicants out of 100 in the same way that he is willing to allow them those vices that go with "original sin." Nevertheless, in deciding between two applicants who are by virtue of their deeds equally able to meet the demands of the position, English very frequently becomes a deciding factor.

* * *

The business man is somewhat surprised upon reading the high school English syllabus to find that no attempt is made to develop a literature of business, as though the commercial and business life of America were unworthy of literature. It is his opinion that there is as much glory in the career of an Edward Bok or a Farquhar as

there is in the life of an Alexander or a Napoleon. It is the contention of the business man that in view of the fact that America is one of the greatest industrial and commercial civilizations in the history of mankind, it is somewhat surprising to find that there is no trace of it whatsoever in literature. It is not expected that high school students should be encouraged to interest themselves in the various technicalities of business, but it is believed that the Board of Education should encourage the writing of a literature that would reveal the commercial and industrial glory of the great pioneers who, in the last 60 years, have built up one of the finest civilizations in the world.

Unfortunately, the literature of business is not yet very extensive. Much has to be done before such classification can be established. Tentatively the following books given below are proposed for consideration:

The business man finds that the high school graduate arriving in business is as bewildered as if he had come into a foreign territory. He literally does not know how to behave himself. He is awed, frightened, nervous, and at times panic-stricken. To him business is a hard life, consisting either of wild-cat speculation or slave-driving with occasional riots, known as strikes. To him a Morgan or a Ford is either a superman or a swindler. In short, he does not know that there is such a thing as a natural business life, just as there is a natural school life. It is therefore proposed that the high school students be encouraged to acquaint themselves with business as it is and not as it is painted in the sensational columns of the newspapers. This might be done by establishing in each high school at least one club dedicated to the purpose of discussing business topics, business progress, business journals, and the lives of great business men. It appears that at present there are all sorts of clubs in the high schools, debating societies, dramatic organizations, radio clubs, athletic organizations. A business and commerce club therefore might not be so out of place as appears on the surface.

It also appears that students in high schools are encouraged to read certain literary journals like *The Literary Digest.* It is the testimony of the majority of high school students going into business that they know almost nothing of the existence of business journals and magazines that are on the market. It is true that some of these are very technical, but there are also some very good magazines devoted to the more general aspects of business and commerce and their various branches, such as personnel, employment, and efficiency. In particular there are two magazines of great general interest. One is known as *Administration*, the other is called *Printers' Ink. Administration* is a monthly, and it usually contains articles by leading business executives of the country on topics general enough to be of wide interest. *Printers' Ink* is both a weekly and a monthly and is probably the richest and most versatile of business journals, centering as it does all interest on the heart of business—advertising, marketing, and salesmanship.

Edward Bok —"Americanization of Edward Bok"
George Kennan —"Biography of E. H. Harriman" (Selections from) Andrew Carnegie's Autobiography
Albert Bigelow Paine—"In One Man's Life"
A. B. Farquhar —"First Million the Hardest" (Ranks in literary merit with the Autobiography of Benjamin Franklin)
John Leitch —"Man to Man" (Chapters 1, 6, 10, 11)
Louis Brandeis —"Business a Profession" (A very interesting introduction to this Book by Ernest Poole.) The following chapters of the book are recommended:
Business a Profession
Organized Labor and Efficiency
The Road to Social Efficiency
R. W. Babson —"Making Good in Business" (Chapter 7)
Edward Hungerford —"The Romance of a Great Store" (Part 1)

A NEW FORM OF WELFARE WORK

Welfare work has taken many forms. One of its latest is that of giving the worker all that surgical science has to offer in order to enable him to get back to work in the shortest possible time after he has met with an accident. Based on this idea is the work of the Reconstruction Hospital of New York City, which specializes in the treatment of industrial casualties and in their after-care and re-education where necessary.

The Reconstruction Hospital is the resultant of war experiences. In addition to even newer forms of treatment it uses many treatments and methods that were developed in the days when necessity forced war hospitals to put soldiers back into the ranks with full possession of their bodily powers and in just as short a time as possible. Under the care of the Reconstruction Hospital a disabled worker gets back at his trade in a third to a half the time formerly needed.

Even more important than this is the real reconstruction work of the hospital. It has been the experience for many years that when men are injured in some industrial service and the broken bones are repaired and the wounds healed by the usual surgical methods, they have found themselves technically cured, but with distorted hands or feet, with stiffened knee, elbow or shoulder joints, or with deep seated muscular inflammations due to enforced inactivity during their convalescence. By the methods used in the Reconstruction Hospital the workers in a large proportion of the cases go back to their work as able-bodied as they were before they were injured. It is this industrial service which has brought it patients from nearly every state east of the Mississippi, and which has led government agencies to name it as a model upon which similar institutions should be based in every great city in America.

A CORRECTION

Editor Administration:

In the second of the series of articles on "Fire Insurance Accounting," appearing in the July issue, there is an error, which, while quite obvious on its face, may nevertheless have confused your readers. On page 87, in the third sentence from the end of the article, the word "includes" should be substituted for "excludes." The sentence should read as follows: "As the market value of bonds in default includes interest due and accrued, such interest must be deducted."

Very truly yours,

(Signed) W. B. Wiegand.

COMPULSORY ACCOUNTING SERVICES

Editor Administration:

Measures which are proposed for extending the activities of any profession, with resulting benefit to the general public, are entitled to careful consideration, and upon prima facie proof of merit and a generally accepted belief in their proposed efficacy may safely be enacted into laws.

Also, while there is no hope of ever making people honest by legislative enactment, it is possible to require that certain formalities be observed in particular cases which will tend to minimize dishonesty or misrepresentation. Compulsory professional accounting services could be employed to advantage for this purpose. Prominent among these is the audit of public accounts, as for instance, those required by the laws of New Jersey, Chapter 267 P.L. 1918, and Chapter 105 P.L. 1921, "Concerning Municipal Accountants," and Chapter 268 P.L. 1918, and Chapter 106 P.L. 1921, "Requiring the Audit of Public Accounts."

Commenting on these laws in a recent issue of *The Journal of Accountancy*, Edward L. Suffern, C. P. A., stated, among other things:

> They have impressed a great many of the governing bodies which never were so impressed before with the importance of careful and legalized financing and accurate accounting. They have imbued many officials with a higher sense of responsibility and have established and co-ordinated administrative measures that did not exist or were unrelated before.

It is difficult to understand why there has not been more insistent demand on the part of taxpayers for the information divulged

by these audits, which the taxpayers are entitled to receive and which would enable them to determine with what measure of economy and efficiency their affairs were being administered. Each individual, either directly or indirectly, bears a share of the burdens of taxation and therefore each person should be interested in knowing how the money raised by the various forms of taxation is spent.

As tax burdens increase, there will undoubtedly be an increased interest in matters of tax accountability and those governing bodies which cause reports of tax receipts and disbursements to be distributed among the taxpayers will find their action meeting with an immediate and grateful response.

Another class of cases in which professional accountants and the general public would benefit by compulsory accounting services is in the accounting for decedents' estates. Where a trust company is appointed as executor or administrator, the accounting procedure is generally supervised by an officer familiar with such accounts, with satisfactory results. In accounting for large estates professional accountants are frequently employed to verify and state the accounts. The cost of such services would not add materially to the direct expense of administration. On the other hand they would frequently be the means of saving considerable sums which would otherwise be dissipated through lack of effective accounting control.

Compulsory accounting services might also be required in receiverships and insolvencies. Frequently these are entrusted entirely to lawyers, but in view of the fact that a portion of the services rendered relate to matters of accountancy, it would seem reasonable that all such matters would be more economically and efficiently cared for by accountants.

Again, the laws of the various states might require that corporations incorporated or doing business therein submit annual balance sheets and statements of profit and loss certified to by professional accountants. This requirement alone would probably result in a saving to investors of hundreds of millions of dollars annually. Professional accountants would not certify to statements of get-rich-quick concerns who otherwise might attempt to sell their securities to the public.

The federal government might also establish a rule of income tax procedure under which firms could submit balance sheets and statements of Profit and Loss certified by professional accountants who would be registered with the Income Tax Unit under the title "Accredited Accountants." If these certified statements were submitted it would probably be found unnecessary, except in rare cases, for the tax department to make field audits, thereby reducing the time required to close the tax files of such firms and relieving them from further doubt as to federal tax liability.

If such a provision should prove an instrument for expediting the settlement of federal tax cases it would be viewed with favor by business men and bankers throughout the country.

The application of the principles of compulsory accounting, in connection with the budget system adopted by the federal government, is productive of satisfactory results, the director of the Bureau being able to report in detail estimated savings for the current fiscal year of more than $250,000,000.

Action designed to bring about more effective supervision of the accounts of members has recently been taken by the New York Stock Exchange, and it is believed that these measures will safeguard the interests of the public without imposing unnecessary hardship upon its members. If their affairs are being conducted properly, a periodic examination of their accounts will disclose this fact and in the event that they are not being so conducted that fact will also be disclosed. Should the present plan not prove as effective as anticipated, further action will no doubt be taken by the exchange to extend the scope of its regulation in this direction.

One needs but little business experience to appreciate the viewpoint which Herbert Spencer had when he wrote his essay entitled "A Business Principle" from which the following is quoted:

> Many years ago, when on the managing committee of a club, I disgusted the secretary by remarking that in matters of administration, as in

matters of business at large, the maxim should be:

Do not suppose things are going right till it is proved they are going wrong, but rather suppose they are going wrong till it is proved they are going right. This was a hard saying for an official to hear; but, I hold it to be a saying worthy of recognition by those who are concerned with affairs, private or public.

His concluding thought is especially interesting:

It should ever be borne in mind that with a type of human nature such as now exists, going wrong is certain to occur in course of time if there are left any openings for going wrong, and that the only prudent course is to be ever seeking out the openings and stopping them up.

In 1862 England first enacted laws for the protection of investors in the shares of corporations, and with subsequent revisions these laws are still on the statute books of that country. After a satisfactory experience of more than 60 years their present laws furnish models for similar legislation in this country which should prove as effective with us as it has with them.

The Canadian Bank Act of 1913, also contains provisions which might well be considered in connection with any proposed legislation.

With the enactment of appropriate laws relating to compulsory accounting and reporting, with adequate penalties prescribed for their violation, the standards of business and accountancy practice would be raised to the mutual advantage of all professional accountants and the general public.

(Signed) Robert Atkins, C. P. A.
Member of R. G. Rankin and Company.

THE GLASS-TOPPED DESK

In the June *Harpers*, Frederick L. Allen talks very pleasantly of the time when he will install in his office a glass-topped desk.

Just what it is that makes the glass-topped desk the mark of the efficient man, I do not know; but I am aware that all gentlemen important enough to wear to business blue serge suits with white edgings to their waistcoats are to be found seated at immense glass-topped desks. Underneath the glass there should be stretched a map of the United States, with those cities marked in red in which there are sales offices of the Reliance Gumdrop and Gumshoe Corporation, or else (according to the whim of the man at the desk) a complete statistical table showing the annual output of safety pins for the years 1900 to 1920, or something equally overwhelming. For myself, I have not definitely decided what shall go under the glass.

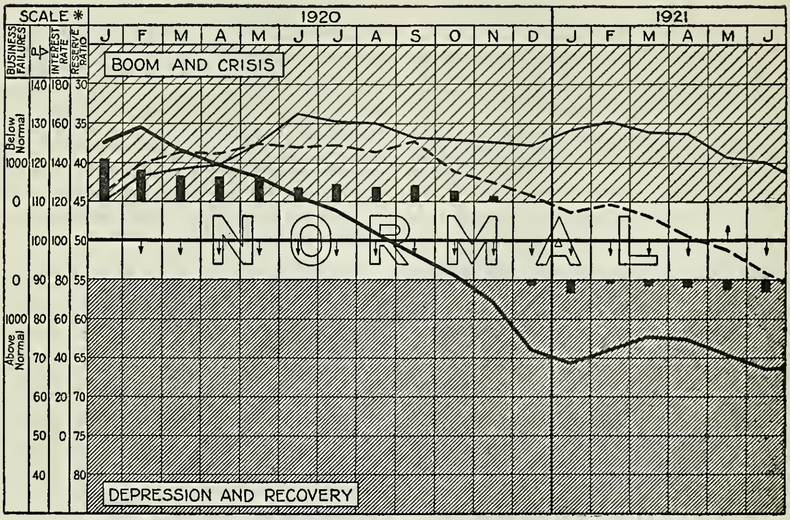
The possibilities are too great and after some further discussion of the matter Mr. Allen goes on to the other fittings of his desk:

The desk will be practically bare. An ash tray, perhaps, will be there as a fitting adjunct to the box of excellent cigars in the lower left-hand drawer, and possibly some baskets marked "Incoming" and "Outgoing" and "Immediate Attention" and "Eventual Attention" and "For Signature" and "For Profound Consideration." The presence of these baskets will make it almost impossible for me to waste time signing my incoming mail or giving any profound attention to my outgoing mail or doing any of the other things that the lesser executives who have not learned the proper use of baskets are constantly in danger of doing. You whose desk is littered with papers will look at my baskets and marvel.

Having disposed of his desk, a few fitting rules are added for the government of the office force:

If you ask to see me and I happen to be busy swapping yarns with an acquaintance, you shall be told by my secretary that I am "in a conference." The thing shall be said in such a tone that you will be confident that nothing less than the settlement of the German reparations question is occupying my vast intellect. If, on the other hand, I do not happen to be at my desk, you shall be told that I have "just stepped out." The expression may seem unnecessarily specific. "Mr. Allen has just gone out;" doubtless that would do very well. But I find that the secretaries of all great executives prefer "stepped out" and "stepped out" it shall be, if only to show that my locomotion is normal. . . .

Will you be impressed? Probably just about as much as I am impressed by the average executive whom I see and the things I read about him.



Note on Scale: Failures—Number above or below normal; $\frac{P}{V}$ Line—Index number; 100 equals 1912 rate;

THE BUSINESS TREND—A BAROM

PREPARED BY LEWIS H. HANEY,

EXPLANATION OF BAROMETER.—The trade barometer shown above is so constructed that when business is in the stage either of boom and expansion or is moving downward in the early stages of crisis, the curves and vertical bars are in the upper area. When the general business condition is that of depression or the beginning of recovery, the curves and bars are in the lower area.

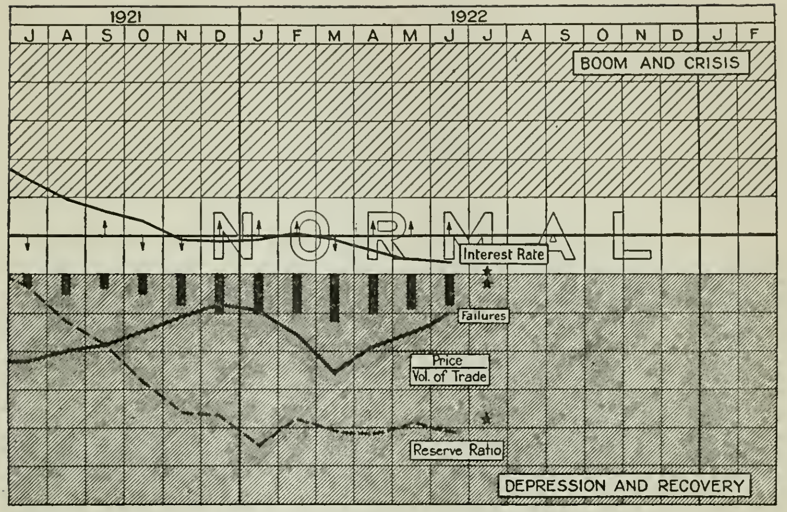
The light line shows the course of the interest rate on prime commercial paper, with adjustment for normal seasonal variation. It is based on an index number, 100 equaling 5 per cent. The dotted line shows the federal reserve bank ratio of cash reserves to note and deposit liabilities, *the curve being inverted* so that an increase in the ratio causes a fall in the curve. The heavy line shows the relation between the price level (Bradstreet's index number of wholesale prices) and the physical volume of trade (car-loadings × tons per car). The bars projecting above or below the normal zone indicate the movement of business failures (Dun's). Bars projecting above the "normal" area, show a smaller number of failures than normal; bars projecting below show an excess of failures over normal; the absence of any bar would show that failures are normal. The arrows pointing up or down from the center line of the normal zone show by their direction the course of a special six-commodity price index. The stars indicate the probable trend of the curves and bars during the current month.

THE BUSINESS TREND IN JULY

Taking up the individual factors in the industrial situation shown on the chart the salient points are the following:

1. All the factors are subnormal, as shown by the fact that the various curves and bars are in the area below normal. This means that industry is still in a condition of depression or recovery from depression. Furthermore, there is really no "boom" in sight and no very rapid return to normal is indicated.

2. The trend of wholesale prices is upward. This indicates a progressive reduction of surplus stocks of most basic commodities and a better



Interest Rate—Index number, 100 is based on 5 per cent; Reserve ratio—Actual figure, scale inverted.

ETER OF INDUSTRY AND TRADE

Director, New York University Bureau of Business Research

demand for them or for the products derived from them.

3. Business failures are rapidly approaching normal. This is one of the most favorable indications shown. It is to be remembered that the chart has allowed for the normal seasonal variation in number of failures as well as for the normal annual growth. This improvement in the failure situation indicates clearly that industry and trade are well past the worst and that credit conditions are much improved.

4. The PV line is now moving upward. This line, by its decline which began in January, forecast the recent setback in industrial recovery and the uncertainty which has lately prevailed. Its present relatively sharp rise forecasts real industrial progress and warrants the judgment that a general return to normal net earnings in basic industries will be achieved by fall.

5. The federal reserve ratio continues to fluctuate narrowly at a level which indicates that credit conditions have become stabilized. The indications now are that the reserve ratio curve will show some rise in July and it seems probable that by fall it will have risen to an appreciably higher level.

6. The interest rate curve in declining further shows an increasing ease of funds and a decrease in business risks. It reflects the closely interrelated facts, that, in the present condition of uncertainty, liquid funds have accumulated and that the demand for such funds in industry and trade is relatively small.

In general, the reading of the barometer indicates fundamental improvement in June over May and warrants a favorable forecast for a future not over six months distant.

Two factors not reflected in the barometer constitute the only "ifs" in the forecast. These are:

1. The unforeseeable political and labor disturbances.

2. Conditions abroad.

With regard to the latter factor, it must frankly be admitted that foreign conditions

are a serious handicap to the recovery of American industry and one which should be carefully watched and duly allowed for. The United States is dependent upon foreign markets both as a seller and as a buyer to such an extent that a complete return to normal is not to be expected until much sounder conditions are established abroad.

The fundamental importance of the PV line lies in the fact that it represents the heart of the problem of industrial readjustment. The solution of that problem is to be found in checking physical volume or reducing price where there is special overproduction, and in increasing volume or price where there is special underproduction. High prices induced overproduction or maladjustment of production (e.g., rubber and copper); falling prices made the situation untenable and brought crisis; now we are going through a process of readjustment, marked by reducing inventories. When it becomes a general condition that prices are rising relatively to quantity produced and in stock, or that quantities produced and in stock are falling relatively to price, recovery will be at hand.

It is this recovery which the PV line is apparently beginning to show. The doubts are due to artificial factors which tend to prevent the readjustment. Organized labor and monopoly are such factors within our country; while political disturbances, together with tariff and currency tinkering, have a similar significance in our foreign relations. To the extent that the unions keep wages or working conditions relatively unreasonable in any industry (as in transportation) they prevent adjustment of supply and demand at a price which will clear the market. So it is with the policies of the dominant interests in the petroleum industry.

If these disturbing factors should not become stronger than now seems likely, the PV line would continue to rise, indicating a growing normality in the value adjustment between supply and demand for goods of all sorts.

And if the PV line continues to advance, demand for funds in business will cause the reserve-ratio curve to rise about six months after the beginning of the advance of the PV line, say in September. This will be followed, in turn, by a rise in the interest rate beginning about three months later, say in December. That would make the "turn of the year" this time really mean something for industrial progress.

All depends on the relation between physical volume and price. If and when prices rise *after* excess stocks have been worked off, prosperity will follow. As more and more industries have succeeded in liquidating and getting on a fair price basis, the general trend toward prosperity has begun.

The following facts shown by the barometer bear upon the future of the stock market. The reserve ratio indicates liquidation and deflation at nearly their high point, which means that there is a very broad credit basis with no immediate indication of a tightening of the situation for, say, three months. The interest rate is apparently nearing the bottom but will probably register easy money for a considerable period, say six months. Although fluctuating because of labor disturbances as affecting physical volume and price movements, the PV line shows a general upward trend which forecasts a tendency toward better net earnings in business. For these reasons, as confirmed by the failure statistics, it may be safely concluded that there is no indication now apparent of a serious decline in the stock market.

It is to be noted that The Business Trend does not rely on the course of the stock market as a basis of forecasting. This would be putting the cart before the horse. The logical procedure is to base one's forecast on those factors which enter into the judgments of those who buy and sell securities. These are, in general terms, the ease of money and credit and the prospects for net earnings; and a knowledge of these factors should enable one to forecast the stock market in a broad way rather than to depend upon that market as an index of the industrial future.

Aside from the barometer, improvement is forecast by greater consumer purchasing power and a satisfactory outlook for crop values. Lack of foreign buying power is a drawback, and decreased bank loans show a rather stagnant condition in domestic business.

# ADMINISTRATION

The Journal of Business Analysis and Control

SEPTEMBER, 1922

THE KANSAS COURT OF INDUSTRIAL RELATIONS

BY HENRY J. ALLEN *

OUR company (Joplin and Pittsburg Railway Company) was one of the first to have labor cases tried before the Court of Industrial Relations of the State of Kansas. We have for a long time been in favor of the principles of such a law, properly framed and honestly and wisely administered.

This is the opening paragraph of a letter written by John A. Prescott, vice-president of the company under date of February 24, 1922. The Kansas Court of Industrial Relations, the pioneer experiment in the orderly adjudication of labor disputes, afforded the employers and employees of the Joplin and Pittsburg Railway Company a legally authorized and impartial tribunal where they could go with their differences for settlement, instead of fighting it out by the hoof and claw method of the strike with its concomitants of waste, violence, and loss of property and life.

This railroad company had tried the old way. Its executives knew what the strike meant. The workers on this road also knew the hardships, the want and suffering that follow the wake of the strike. Here was a court backed by all the power and dignity of the state, representing neither side of the dispute, but like all courts of law a symbol of justice to both sides and to the public at large, whose interests might be jeopardized by a long drawn-out controversy with labor losing its wage and the road its profit by a stoppage of continuous operation. So to the Court of Industrial Relations they took their controversy to abide its decision even as the reader would abide the impartial adjudication of a private dispute in a court of law.

But how did the belligerent forces feel after the court had spoken? Let the vice-president take the stand and testify. Under the same date and in the same letter he said:

> At any rate, the decisions so far have been accepted and complied with by our company and our employees, and the operation of the property has not been interrupted on account of disputes between our employees and the company since the Court of Industrial Relations was established.

During the hearing, and pending the decision of the court, there was continuous operation of this railroad. The employees did not lose a day's wage, their wives and children did not suffer an attenuated pay check at the

*Governor of the State of Kansas.

end of the month. The employers were not forced to shut down for lack of an experienced crew. The public did not suffer the inconvenience of suspended operation, and the hosts of laboring men in other lines of industry who were dependent upon this road to go to and fro in their work—they, too, profited by the continuity of service made possible by adjudication as a substitute for strikes. Taking the basis of the Court's awards, the employers and employees of not only this road but the entire industry in Kansas agreed together upon a new schedule. The reader might well contrast this orderly settlement with a two-months' strike in that industry the last year of the World War. That strike cost the employees of the industry thousands upon thousands of dollars in loss of wages. One strike on this road, lasting 80 days, totally paralyzed the business, with a result of more than $68,000 loss to the company. Later a 36-day strike occurred, with a corresponding loss to the company. In both of these strikes, of course, there was a very heavy loss in wages to the men and a tremendous economic waste in that portion of Kansas and Missouri served by the company.

As characteristic of the spirit of the Industrial Court, let me quote the definition in its decision that a "living wage" is a "fair wage." In that decision the Court said:

> Such persons, in all fairness, are entitled to a wage which will enable them to procure for themselves and their families all the necessaries and a reasonable share of the comforts of life. They are entitled to a wage which will enable them by industry and economy to supply themselves with opportunities for intellectual advancement and reasonable recreation but also to enable the parents working together to furnish to the children ample opportunities for intellectual and moral advancement, for education and for an equal opportunity in the race of life. A fair wage will also allow the frugal man to provide reasonably for sickness and old age.

A year later this company posted a notice declaring a 20 per cent decrease in wages. The employees of the road again came into the Industrial Court, with a counter demand of a 10 per cent increase. The Court issued an order fixing a 10 per cent decrease owing to a reduction in the cost of living and this order was accepted by both sides and under it they are still operating. It is significant that in this last case the Court was asked by both employer and employee to write into the contract a stipulation that all questions upon which no agreement could be reached would be submitted in the future to the Court. And for nearly a year now both the road and its employees have operated without a dispute for the Court to adjudicate and in compliance with the Court's decision as to wages and working conditions.

The history of industrial relations has been for the most part the history of bettering the conditions of the laboring man. No one questions the fact that nothing should be done by the state to prevent the continuation of that steady progress. The laboring man must be given prompt and complete justice. He must be given the government's guaranty of absolute protection in order that his progress may be sane and constructive. To show how the Kansas Court of Industrial Relations is a court with a heart for the working man, let me take an early case from the court calendar.

Before the Court one day in the summer of 1920 there stood a man with a peg leg. Dressed in faded and greasy blue overalls, he was the plaintiff in the case of the Stationary Firemen

and Oilers. His duties were those of tender at a turntable. On a salary of $97 a month—equivalent to about $45 a month before the war—he had been supporting a wife and six children. The records seemed to show that the railway brotherhoods had not included him or his union in their efforts to secure higher wages and better working conditions.

This tender at a turntable testified that he worked seven days a week, and that when he came home at night he would help his wife do the washing which they solicited in order to keep starvation away. Upon close questioning he told the Court some other startling facts. It was not unusual, he testified, for him to take home a large part of his noonday lunch that his wife put up for him and to slip it back surreptitiously with the other food at night so that his six children might have enough. And then he would start in at nightfall and help get out a washing.

The judge who presided at this session of the Industrial Court told these things, among other incidents of the kind, to a friend one day. He got up from his chair and paced back and forth. After the judge had stopped talking, the listener went over to the window and stood for a long time, saying nothing. He is rather phlegmatic —some call him cold, and some say he is partial to corporations. Suddenly he turned and almost shouted, as men do sometimes when they want to conceal their emotions:

> This is more than a law! It's more like gospel. If the people would only understand it! Oh, if we were only thinking of the safety of the public we wouldn't be nearly so concerned! Why, this thing is more than that! It means justice to a man who has never had a chance to get it in such matters before.

By decision of the Court of Industrial Relations this particular laborer was given an increase of more than 30 per cent. As I have already mentioned, he belonged to a large and important class of railway labor for which the four big brotherhoods have done nothing. If space permitted I could mention a number of instances to prove what the Court has done for labor. Its record shows it is a very human court—a court with a heart.

I realize in this time of strife in the railway field that the Court may have before it some of the most difficult problems ever presented to the tribunal. But for me to anticipate any decisions at this time would not be in keeping with the impartiality to both capital and labor for which the Court stands. On one matter I am firmly convinced: it is the duty of the government to see to it that the strife which has grown between employer and employee shall no longer express itself in the form of warfare upon an innocent and helpless public—the party of the third part.

EDITORIAL NOTE

The Kansas Court of Industrial Relations in no way interferes with the voluntary adjustment of disputes between employer and employee. But it does regulate the methods where the public, or as Governor Allen calls it, the party of the third part, is brought into the case.

Under the jurisdiction of the Court come all those who are engaged in the manufacture of food products necessary for the preservation of life, and in the manufacture of clothing necessary for public comfort. In addition, the Court has jurisdiction over those engaged in the mining or transportation

of fuels used for domestic or industrial purposes. It no longer concerns itself with the problems of public utilities in so far as the determination of rates is concerned, but still has the power to pass upon industrial disputes in that field.

Section 7 of the law establishing the Court clearly and distinctly sets forth the main provisions under which it operates:

> In case of a controversy arising between employers and workers, or between groups or crafts of workers, engaged in any of said industries, employments, public utilities, or common carriers, if it shall appear to said Court of Industrial Relations that said controversy may endanger the continuity or efficiency of service of any of said industries, employments, public utilities or common carriers, or affect the production or transportation of the necessaries of life affected or produced by said industries or employments, or produce industrial strife, disorder or waste, or endanger the orderly operation of such industries, employments, public utilities or common carriers, and thereby endanger the public peace or threaten the public health, full power, authority and jurisdiction are hereby granted to said Court of Industrial Relations, upon its own initiative, to summon all necessary parties before it and to investigate said controversy, and to make such temporary findings and orders as may be necessary to preserve the public peace and welfare and to preserve and protect the status of the parties, property, and public interests involved pending said investigations, and to take evidence and to examine all necessary records, and to investigate conditions surrounding the workers, and to consider the wages paid to labor and the return accruing to capital, and the rights and welfare of the public, and all other matters affecting the conduct of said industries, employments, public utilities or common carriers, and to settle and adjust all such controversies by such findings and orders as provided in this act. It is further made the duty of said Court of Industrial Relations, upon complaint of either party to such controversy, or upon complaint of any ten citizen taxpayers of the community in which such industries, employments, public utilities, or common carriers are located, or upon the complaint of the attorney-general of the state of Kansas, if it shall be made to appear to said court that the parties are unable to agree, and that such controversy may endanger the continuity or efficiency of service of any of said industries, employments, public utilities or common carriers, or affect the production or transportation of the necessaries of life affected or produced by said industries or employments, or produce industrial strife, disorder or waste, or endanger the orderly operation of such industries, employments, public utilities or common carriers, and thereby endanger the public peace or threaten the public health, to proceed and investigate and determine said controversy in the same manner as though upon its own initiative. After the conclusion of any such hearing and investigation, and as expeditiously as possible, said Court of Industrial Relations shall make and serve upon all interested parties its findings, stating specifically the terms and conditions upon which said industry, employment, utility or common carrier should be thereafter conducted in so far as the matters determined by said court are concerned.

To enforce its decisions, the Court may invoke the powers of the Supreme Court of Kansas. It should be noted in this connection that either employer or employee in the dispute has the same right to appeal to the Supreme Court.

INDUSTRIAL COURTS, COLLECTIVE AGREEMENTS, OR WHAT?

BY WILLIAM LEAVITT STODDARD*

ROUGHLY speaking, there are three methods of attempting to secure and maintain industrial peace. One is by individual character—the influence of the employer with his men. The second is through collective or group agreements between the employees of a company and the management, between a union and an employer, or between a group of unions and a group of employers in an industry. The third is through some form of state or public interposition, whether by mediation and arbitration boards; by special commissions such as the Anthracite Coal Commission; by legal enactments, as for example the Railway Labor Board created by the Transportation Act; or by a court such as is now on trial in Kansas. These methods shade into each other to a certain extent, but, broadly considered, these are the three main lines of attack on the problem of eliminating unnecessary industrial warfare.

At the present time each of these methods is being used with a greater or smaller degree of success in the United States, and the experience which is thus accumulating will, in the long run, enable us to determine the best means to employ in a given situation. Without prejudice for or against any particular mechanism or theory, let us examine recent experience and discover what is actually being said and done.

What I have termed the individual character method is by far the most important, and of all three the most difficult either to describe or to practice. It is neither the fault of the individual employer nor of the individual workman that the peace is broken from time to time. Forces in industry more powerful than any one man or set of men destroy the most perfect of relationships. An entire issue of this magazine could be filled with tragic stories of the passing of the old order, of high-minded manufacturers to whom strikes and industrial strife were strangers, faced suddenly with the turbulence of labor; stories of a lifetime of honest endeavor wrecked by seemingly malicious forces personified in the well-known "reckless agitator;" stories of peaceful, prosperous little plants torn asunder so far as the human working relationships are concerned—and nothing better taking their place. Of what avail is individual character in these circumstances? Against these circumstances the individual seems powerless except he combine with others in like distress. The open shop movement which is at present sweeping the country represents to a large degree the determination of employers who cherish this means to resist untoward changes and to restore the old basis which, they feel, was so much better than the promise of the new.

Long before the establishment of collective agreements on anything like the present scale, the states entered into the industrial peace-making business with the familiar boards of conciliation, arbitration, or both combined. Maryland, as far back as 1878, was the first to establish such a board, later repealing the law and substituting a pro-

* Administrator, National War Labor Board, 1918-1919.

vision for the adjustment of disputes through the intervention of some of the state officials. This provision, duplicated in principle in no less than six states (Arkansas, Georgia, Iowa, Nevada, Pennsylvania, and Washington), lays on the State Board of Labor and Statistics the duty of offering mediation in industrial disputes under certain conditions. If, upon the failure of mediation, the parties refuse to submit their case to arbitration, an official investigation is made and the results are published in the newspapers. The law provides further for the establishment of local arbitration boards, each consisting of one employer, one employee, and a third to be chosen by these two, the decisions of the local board to be final.

It is a striking fact, and one subject to a variety of explanations, that in at least a dozen of the 36 states which have some legal provision for action by the state in industrial disputes, the laws are not used and the boards are inactive. During a hearing before the War Labor Board in 1918, counsel for the employers and representatives of the unions debated two hours as to whether there existed in Connecticut, the field of the particular dispute, a state board of arbitration with jurisdiction over the case which the unions sought to bring before the federal authorities. Such a board does exist in Connecticut, but the president of it recently stated to an investigator [1] that it was "not active."

Similarly, a board of arbitration was set up by law in California in 1891, but no appropriations have been made to give it life. The Wyoming legislature may, by constitutional provision, establish "courts of arbitration," but no action has ever been taken. In New Jersey, unused provisions for local boards remain on the statute books, the state board of arbitration, created in 1886, having been abolished in 1908. And other instances, chiefly in the nonindustrial or smaller industrial states, which could be mentioned.

Active state boards of arbitration have existed in Massachusetts, Maine, Minnesota, New Hampshire, New York, and Ohio for some years; and in 1919 Oregon, Porto Rico, Rhode Island, and Wisconsin created boards of conciliation charged with the duty of investigating disputes and attempting adjustment. These boards do not differ fundamentally from those established elsewhere in former years.

It is a safe statement that in less than 10 states are the boards of conciliation or arbitration, or both, really active. It is hotly disputed by honest men on both sides whether the activity of these institutions is truly beneficial, or, at any rate, as efficient as it might be. There are not lacking those with long experience on such boards who declare that "arbitration has broken down," and demand the establishment of more powerful agencies to enforce agreements and to promote industrial peace by means of some kind of court procedure.

The Kansas Court of Industrial Relations is the first attempt to subject industrial controversies in specified businesses "affected with the public welfare" to court investigation and judgment. The Kansas Court is a sudden and radical departure from the far less powerful boards of arbitration. That it has not been duplicated in any other state is doubtless due in part to the opposition of organized labor, to its very radicalness, and to the American desire of avoiding legal machinery except as a last resort.

Abroad, experience with powerful arbitration boards and courts has been

[1] Carl I. Wheat, whose study of state boards of arbitration, was published in part in the Report of the Committee on Elimination of Waste in Industry.

of sufficient length to have established certain principles from which the nations involved will in all likelihood never retreat. In three countries, notably Great Britain, Australia, and Denmark, this development has reached the stages which make the machinery of very present interest to us in the United States.

The British Industrial Court was established as a court of final appeal late in 1919. It is to be resorted to only when all other means for settling disputes have failed. An official statement sets forth the desire of the government "that trade disputes should be settled as far as possible by negotiations between employers' associations and trade unions," in other words, emphasis is placed, and rightly, on collective bargaining and the "character method" first. The court has as its chairman a government official; its members are representative of employers, workers, and the public, appointed by the Ministry of Labour. When a trade dispute arises, upon counsel of both parties, the Minister may refer it for settlement to the court, which is constituted of such members as the president may direct; or to one or more persons appointed by the Minister; or to a board of arbitration nominated by the parties from a panel of representatives of employers and employees. Certain adjustments arising out of war-time wage decrees come automatically before this court. The court's main function is that of arbitration, but in addition it is an advisor to the Minister of Labour in matters arising out of trade disputes.

More mature is the Court of Conciliation and Arbitration in Australia, created in 1904. Despite increasing numbers of strikes in that commonwealth, the court is considered a success. Since its establishment there have been only three controversies within its jurisdiction which were accompanied by a strike: its jurisdiction is federal and hence limited to what we would term interstate disputes. The court makes awards which the parties to the case are bound by law to obey. It does not, however, make an award if it is possible to bring about an agreement. Its president recently wrote in *The Harvard Law Review:*

> The ideal of the Court is to get such a regulation as the parties ought to put in a collective agreement; and compulsion means merely that as to claims on which the parties cannot agree or as to which some of the parties will not agree, the court can make an award. Very often the mere fact that the court has a power of compulsion in reserve impels the parties to find a line of agreement; and reasonable employers are more willing to make concessions when they feel that their competitors are to be bound by the same terms. In the analogous matters of protecting workers from dangerous machinery, of providing compensation for accidents, of limiting the hours for children's work, there could have been no relief if the workers had to wait for universal agreement on the subject; and legislatures have ha to make such matters the subject of direct coercive enactment.

"Well drawn collective agreements," says the judge, "would be preferable to awards, but it is hard to make them."[2]

Both the Australian and the British Industrial Courts are the outgrowth of years of experiment with voluntary arbitration, mediation, and conciliation. Both to some extent employ mediation and conciliation. Both strive to develop the principle of collective agreements.

This fact leads us naturally to one of the most interesting "substitutes for industrial war," the Danish Industrial Court. Strangely enough, this institution, though in existence more than a

[2] Similarly we find the Kansas Court of Industrial Relations decreeing a reform in the coal mines which the miners had for years sought to secure through the state legislature.

dozen years, is practically unknown in the United States, and not until John Koren published his study of it a few months ago was a record of its history and methods available in English in this country. The Danish Industrial Court is a legally created body; it is at the same time a direct lineal descendant of a board or court of arbitration, established in 1899 by agreement between organized employers and organized labor. The earlier court of arbitration, a private affair, functioned with success for 10 years, failing only at the time of the strike of the typographers in 1908. As one outcome of this great strike, a conference of representatives of the employers' associations and the labor unions drafted the structure of the Industrial Court, subsequently sanctioned by statute.

"The basic conception underlying the law governing the Danish Labor Court," wrote Mr. Koren, "is that industrial disputes should be brought under legal review so that rights may be established and not merely fought over blindly. To this end a clear line is drawn between disputes over special interests and disputes over rights. The former are largely regarded as matters to be settled by private boards of arbitration within the crafts. The latter must be maintained by law and relate chiefly to questions of contract between employers and the labor unions, and the activities of the court therefore center about matters of labor agreements." "The lack of protection of rights is the chief reason for the lack of respect for rights relative to labor agreements," says the chief author of the law, Dr. C. Ussing, who enjoys the rare distinction of having been reelected for 20 years as the presiding judge, first of the Permanent Court of Arbitration during its life, and ever since of the Danish Labor Court.

Denmark being a country where labor and employers are highly organized, with collective agreements the rule rather than the exception, the vital matter in the prevention of industrial warfare is to safeguard and make sacred these agreements. The various crafts have established craft boards of arbitration to which what might be called routine disputes are referred. At the top of this structure of voluntary courts is the Industrial, or Labor, Court. Its chief duty is to uphold the craft boards of arbitration. It has the power to impose penalties for lack of respect for a board of arbitration, for violations of awards of arbitration boards, and for refusal either of employer or employees to arbitrate. In short:

> It is the guardian of the principle and practice of arbitration, and its primary duty is to act in a parental capacity and by admonition or punishment, according to the merits of the case, keep the whole arbitration machinery moving smoothly. The importance of it to industrial peace is self-evident. "The laborer to whom 25 kroner are owing on pay-day finds no protection in the ordinary courts which lack knowledge of the crafts and notably do not render a decision until after the lapse of three months."

This is not the place to describe at length the composition, jurisdiction, powers, procedure, and activities of the Danish Industrial Court. It is the outgrowth of a highly organized condition of industry and could not be imitated in a country where the larger part of labor is unorganized. It is essentially an arbitration court, developed as a result of collective agreements and sanctioned by the state at a time when the protection of agreements had become a matter of public concern. It is based on the recognition of "collective responsibility," and this principle is carried to its ultimate, logical conclusion when a strike called by an

individual employee, not an officer of a union, is adjudged an offense by the union and the treasury of the union is made to pay the fine.

Notably within the last two years in this country, large-scale collective agreements between whole groups of employers and labor unions have been made. There are now joint industrial councils, based on such agreements, in the electrical industry, in the printing industry, in men's clothing and silk ribbon manufacturing, in fishing, and in the building trades. Several great industrial corporations such as Standard Oil and the International Harvester Company have collective agreements with their own employees. Some of the agreements in the industrial groups enumerated above are limited in extent and scope; others, as for example, the joint board for jurisdictional disputes in the building trades, are national and function wherever the building trades are organized, which is quite generally. Whether these contracts are stable enough to withstand the shock of rapidly changing public opinion and whether the parties to them will feel that they are worth the sacrifice, cannot be answered at this time. One such compact, the clothing agreement between the New York manufacturers and the radical Amalgamated Clothing Workers of America, is already shattered and the whole tendency to some extent set back as a result.

A characteristic collective agreement of this kind was drawn up in 1918 in the Cleveland garment trades, at a time when the War Department was anxious to stabilize conditions and increase production on war orders. The agreement is between the Cleveland Garment Manufacturers' Association and the International Ladies' Garment Workers' union. The fundamental principle on which this experiment is based was thus stated in a wage report prepared by industrial experts employed jointly by the two sides:

> We are really experimenting to the end of establishing a sound and perfectly just mode of operation by which employees, gathered into trade unions, and employers, gathered into an association, can co-operate to give the maximum service to the public, and in so doing, achieve for themselves the maximum monetary return which their contributions to the general service justify.

The agreement creates a board of three referees who are empowered to settle disputes concerning hours of work, general sanitary standards, general wage scales and classifications connected with them, after such matters have failed of satisfactory adjustment between the individual employer or his representative and the employee or his representative, who must be an employee of the shop. If the referees cannot reach a settlement, the dispute is arbitrated by an appointed representative of the board, whose decision is final. The agreement forbids strikes and lockouts. The expenses are borne equally by the union and the manufacturers' association.

The agreement is concerned particularly with methods of wage-payment, and it is well worth noting that recourse may be had to time-study men employed jointly by the two sides. The general principles proposed by the experts employed to fit the wages to the work are as follows:

> 1. A plan of wage incentive must be accepted by both employer and employee as the fairest under the circumstances.
>
> 2. It must be based on fair standards of production.
>
> 3. It must be so simple that both workers and employers can figure it out for themselves without expert aid.
>
> 4. It must provide for an increase in reward at least proportional to the increased effort and thought expended in realized production.

5. It should recognize that the mere attendance of a worker ready to work is worth a wage. The management must pay interest upon idle machinery; in analogy it must pay for those human beings that it requires to be present but for whom it does not provide work.

6. It must safeguard both the employer and the workman against unfair rates or conditions.

7. The incentive is largely weakened when payment is deferred. Therefore the reward must quickly follow the effort.

8. To the extent that the reward is for individual effort, it should be paid for individual effort. The real efficacy of an individual depends upon the extent of the co-operation he gives to and receives from others, but to the greatest degree possible his personal reward should be responsive solely to his individual effort.

9. The incentive should not be such as to stimulate an abnormal effort; for an abnormal effort must, by the law of nature, be succeeded by a sub-normal effort, and thus the ends of production are not furthered. It is not necessary to have recourse to the so-called humanitarian arguments to demonstrate the futility of spasmodic, abnormal effort.

10. Any plan adopted should include the maximum number of elements that have been successfully demonstrated in practice. This is not to discourage legitimate speculation and inquiry, but to make certain that we are availing ourselves of all past efforts and not retracing old ground. The place for experimenting to start is where exact and classified knowledge stops.

Another joint agreement which covers an entire local industry and which, after a year and a half, is said by an officer of the employers' side to have achieved its aims, was signed late in May, 1919, by the organized employers and the unions in the building trades of Portland, Oregon. This also presents typical features. The machinery provided calls for an arbitration board of five elected representatives of each side, the members not being, however, persons engaged in the trade, or public officers. Full power to enforce the agreement is lodged in the board which may punish violations by fines. It is interesting to observe that the principle of "collective responsibility" which we saw was embodied in the Danish Industrial Court, is carried in this agreement, though to a more limited extent. For instance, individual offenders, members of labor unions, have their fines collected by the union, or, in the event of failure to pay, are suspended by the union and refused readmission till the fine is paid up.

In addition to the arbitration board there is a joint conference board to settle wage and working rule adjustments only. This board consists of three members elected by the General Building Contractors' Association and three members of each union represented in the Building Trades Council. When taking action by majority vote, only two of the three labor members whose craft is affected may sit with the board.

A recent government report on the work of the building trades under this agreement states that since it was signed not a single job has been struck, no stoppage of work worth mentioning has occurred, not one dollar has been lost on account of labor trouble, and contracts with the building public have been fully carried out.

An important feature of the agreement is that, while it is a union agreement, non-union men may be employed. In other words, it is not a closed shop union agreement. Union men are given preference in employment, and it is permitted to ask non-union men to join and "contribute their share to the support of the council and thereby strengthen the working of the agreement." The success of the contract is attributed to three things:

1. The fair attitude of the employers toward the men

2. The exceptionally high character of the business agents
3. The fact that among the men themselves there is a very large percentage of home-owners, citizens, and taxpayers

The report of the President's (second) Industrial Conference put forward the most elaborate of recent American proposals for the adjustment of industrial disputes through the intervention of public authority. These proposals, now over a year old, have not been acted on but have nevertheless been the subject of much discussion and comment, unfavorable as well as favorable. It is significant to recall, however, that the Conference recommended as "the new basis of industrial peace" the organization of employers and employees by means of shop committees, works councils, and the like:

> Employee representation organizes the relations of employer and employee so that they regularly come together to deal with their common interests. It is operating successfully under union agreements in organized shops. It is operating in non-union shops, and it is operating in shops where union and non-union men work side by side. It is in itself an agency of collective bargaining and co-operation where union agreements do not obtain.

The Conference termed collective agreements "prevention," and offered as cure or "medicine" its national machinery of adjustment, dividing the country into a number of industrial regions, each with a regional adjustment conference, the whole heading up in a National Industrial Board. This machinery was obviously an extension of the plans put forth and in part realized by the government during the war. The proposals recognized the value of trade agreements, stating that:

> Industrial agreements reached by employers and employees without recourse to the national machinery may be filed with the National Board, and such action constitutes an agreement that future disputes, not adjusted by the machinery supplied by the agreement, shall pass an appeal to the National Board.

We are now well into the "reconstruction period" and the problems of industrial unrest are as pressing, if not as acute, as ever. The strong tendency away from governmental action or interference, a natural reaction to the iron control exercised by the state as a war necessity, shows little sign of weakening. If this is true, we may expect that the particular question of preventing or regulating industrial warfare will not be approached at once by the political or legislative means. It is a commonplace that legislation is rarely creative, but must give sanction to customs and practices which are already quite generally accepted and which require statutes to make them universal. Despite notable exceptions, this rule prevails. If this assumption is correct, it would seem that, in the normal course of events, we are a long distance from establishing a system of courts such as that outlined by the President's Conference. The experience of Great Britain, Denmark, and Australia points to the probability that before a competent and successful system of courts can be created, the economic organization of employer and employee must reach a greater degree of completeness than is the case in this country. The exception that proves the rule is the Kansas Court.

The virtual abandonment, in many industrial states, of state boards of arbitration indicates that the prejudice against governmental intervention in labor controversies is still powerful. The spread of the employee representation movement, side by side with the open shop movement, suggests at once that employers, to speak for one side alone, look askance both at

governmental projects and at trade union agreements. Since an Industrial Court must almost by necessity deal with trade union agreements, thus directly encouraging such contracts, and since a court is, by definition, a governmental agency, it would seem that the time for establishing such an authority is not ripe. Certainly this is true of the nation as a whole; it is probably also true of the vast majority of the states.

It is also worth remarking that the most ambitious industrial court ever established in this country, the Railroad Labor Board, has within the last two months had its prestige severely damaged. Without any desire to enter into a political controversy, it will in all probability be the verdict of history that if the Administration at Washington had unfalteringly backed this institution, public opinion would have supported it whole-heartedly. The Labor Board provided theoretically complete means of adjusting issues which could not be settled by the collective bargaining machinery carefully built up over a long period of years by the railroad labor unions and the railroads themselves. What it lacked was what the Administration could have given it at the critical time, namely, some kind of real power to enforce its decisions. We are reminded, by contrast, of the Danish Court which has always had power behind it. The chief virtue of the Kansas Court, as Governor Allen has often said, is that it has "punch." But there is a decided difference between "punch" imposed by legislation, which is necessarily always a compromise among conflicting interests, and "punch" imposed by the common sense of parties to a contract of agreement.

I am not advocating either an industrial court, trade union agreements, or other forms of collective bargaining as a remedy, sovereign or otherwise. I am trying to "estimate the situation" and see what is likely to happen, in view of what is happening and what has happened. One thing is certainly clear as crystal, and that is that however hopeless it may seem, the "character" method, mentioned in the beginning of this paper, is never out of date and, in the last analysis, underlies any other means or methods that may be attempted. If by character it is possible to do away with the hostility, suspicion, distrust, even hatred which colors the industrial situation today, then character must be enlisted for this war against war. No peace can come till the attitude of mind is right. Here and there by individual or collective agreement attitude is established that makes for the best relationship. When such a state of mind prevails and when men are organized to build soundly on the right idea, the structure will build itself. Of this we can be sure, paper plans and theories to the contrary notwithstanding.

THE DEVELOPMENT OF BUSINESS FORECASTING

BY FRANK PARKER *

BUSINESS forecasting has come into the foreground with the present mechanistic era. The existing economic system of production and distribution is diametrically distinct from that which existed three centuries ago. There was then a regimé of individual production for immediate use; individual production, individual ownership, and individual exchange. From the first step to the last the worker controlled his means of production and controlled his product. Since the beginning of the eighteenth century individual production for immediate use has gradually been supplanted by social production for private profit. This change was accompanied by a gradual growth of a capitalist regimé, a wage-earning class, a national and international market, and a distinct money economy in which the difference between buying price and selling price was an essential criterion of success.

This change in our business organization shifted the emphasis from the personal to the impersonal. Contiguity of buyer and seller, typical of the era when individual production for immediate use prevailed, gave way to a regimé where time and space permitted the intervention of complex factors between the initiation and completion of a sale. With this widening gap between the buyer and the seller, the enterpriser was confronted with a problem of determining future demand, a problem much less simple than that which obtained under the economy of individual production for immediate use. This problem of ascertaining the future state of the market has progressed through the stages of guesswork and experimentation until today there has developed what might be termed the inception of a science of business forecasting.

The worth of business forecasts is predicated upon the theory of a rhythmic movement in business, going through the successive stages of depression, revival, prosperity, and crisis. As long as economists attempted to ascribe the phenomena of commercial crises to acts of God, such as fire, flood, or famine, or other unexpected occurrences, there was little to be gained from any attempt at forecasting the business trend. The unforeseen development of events over which man had no control might immediately set at naught the most careful attempt to determine what business was likely to do in the future. It is true that even today there is no widespread acceptance of any particular theory explaining the wave-like movements in business, but gradually the view is being taken by economists and business men that the rhythm of business activity may be partially controlled and directed, provided there are rendered available for scientific examination the factors and principles underlying our present money economy. This attempt to arrive at the principles which will explain the course of business is in keeping with the scientific method of approach prevalent in this era.

II

The significance of an index of general business conditions may seem at

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first sight devoid of any practical value to an individual enterprise or a group of businesses of the same type. However, an examination into the organization of our present business regimé shows that a typical enterprise is one cog in a great machine. Our industries are carried on by sets of nominally independent plants which pass on goods to each other in serial succession. For example, one series embraces sheep raisers, shearing, and pulling processes, warehouses, yarn mills, spinning mills, brokers, textile manufactories, and retail stores. Each set of enterprises, from the farms and ranges to the retail stores, is industrially dependent on other industrial plants, which equip it with buildings, machines, fuel, etc. Again, there is an actual dependence between the whole mass of enterprises on the one hand, and the transportation, banking, and insurance facilities on the other hand. It follows that the progress or decline of an individual enterprise is bound up with the general movements of business as a whole and cannot be determined simply by considering the individual enterprise as an isolated unit. An accurate index of general business conditions, consequently, assumes no mean significance to the manager of an individual plant.

This integration of business makes it necessary for the manager of an enterprise to have a twofold point of view. He must be able to bring to his analysis of business conditions what has been designated as an inside viewpoint with an outside perspective, and an outside vision with an inside knowledge.

An analysis of inside facts with an outside perspective extends to costs, sales, markets, credits, production methods and control, and personnel problems appertaining to the individual enterprise. Its purposes are to eliminate waste of materials, money, and effort, to increase production and sales, to decrease costs, and to increase profits.

An analysis of the outside facts with an inside knowledge proceeds upon the premise that individual experiences are absorbed in the totality of business experiences as they are shown in the trends of production, earnings, prices, credit conditions, wages, and population growth. Here the aim is not only to secure an immediate increase in profits, but to measure or to anticipate demand, forecast change, and to measure and correlate the economic and social forces which determine business growth and decline. The long-time viewpoint and the study of fundamental causes and effects are the controlling factors.

These two types of viewpoint are complementary. The results of this external analysis, if it accomplishes its end, may therefore be as pecuniary as the results of the internal analysis. Thus it is that the closely knit integration of business makes it necessary for the individual enterpriser to be familiar with, and to predict if he can, the course of the stronger undercurrents of business which determine the ebb and flow. For in the long run the strength of the external forces determines the ultimate success or failure of an individual enterprise.

III

The foregoing discussion has served to illuminate the interrelationship that exists between the business forecast and the budget. There is a positive need for frequent control of the budget estimates to avoid the penalties of waiting until the developments in the business world have rendered bootless any change of tactics or policy. Budgetary control has two prerequisites:

1. A periodic record of expenditures of sufficient accuracy to be useful in determining the policy of the individual business.

2 A knowledge of general business developments as well as specific information appertaining to the particular enterprise.

An acquaintance with the figure facts must be supplemented by a discernment of the trends affecting the world of business, for being privy to the facts avails little if lack of familiarity with the currents of business prevents the application of the knowledge so possessed.

At this juncture it is necessary to distinguish between business reporting and business forecasting. There are in the United States today a variety of publications issued by chambers of commerce, banks, and mercantile institutions under the cognomen of forecasts, which are nothing more nor less than reports of business conditions as of the date of publication. Such business reports portray the state of business at a particular moment but seldom attempt to show the trend thereof over a long period of time. While it is true that the only basis in the material world for estimating the course of the future is the events of the past, and while it is true also that the peculiar integration of business above noted links the factors operating in the present phase of a business cycle with those likely to operate in the future, yet one must hold an instantaneous snapshot of business conditions as being of less significance than a complete motion-picture showing the development of business conditions up to the present time. Too often are these business reports regarded by the business men among whom they are circulated as indicators of a trend, when in reality they are stereopticon pictures. Similarly, there is evident a failure on the part of the users of such business reports to distinguish between those which definitely are based upon national figures and those which are based upon local factors.

This does not mean that the report of local or sectional conditions is not of value to the enterprise operating in that locality, but when such a sectional report is distributed on a national scale it is often carelessly regarded by the recipients as an indicator of national conditions. Space permitting, it would afford an interesting discussion to consider the qualifications of individuals who are responsible for the preparation of these business reports; seeking to ascertain their knowledge of economic principles, their familiarity with statistical methods, and the impartiality of their point of view.

IV

The first attempts at business forecasting were of a commercial nature and were primarily designed to make money for their sponsors by assuming to furnish, more or less exact forecasts of the future through the use of which the individual subscribers might attain success. There should be no disposition to undervalue the work of the pioneers in the field, for they made the business man aware of the problem confronting him and directed his attention to pertinent factors that would otherwise have gone unnoticed. The defects of many of the original business forecasting services appertained to method rather than substance; their forecasts were centered around charts and graphs depicting fundamental trends in business but in the light of our present knowledge the subjects chosen were of dubious significance and frequently ignored the elementary standards of sound statistical methods. Business men of seemingly unquestioned shrewdness tended at first to rely complacently upon the assumption

that the curves portraying a trend would proceed uninterruptedly in the direction indicated by the draughtsman, and contented themselves with a perusal of superficial summaries instead of probing for the essential facts. This, however, did not last. Repeated experiences with conditions that not alone failed to conform to the predicted trend but frequently went contrariwise, coupled with extravagant claims and promises by promoters and annoying onslaughts of salesmen, gradually dimmed the luster of business forecasting as a commercial enterprise.

Despite the various blemishes noted, the idea of business forecasting has enjoyed a continuous development and the interest of the business community in this field has shown a corresponding growth. This is shown by the fact that the number of business reports regularly issued has greatly increased, and that a number of well-conceived commercial services regularly sold to subscribers continue to exist and to flourish.

V

There are four types of business forecasts in the United States at the present time:

1. Forecasts issued by enterprises such as banks or brokerage firms, as part of the gratuitous services rendered to their customers.

2. Forecasts issued by institutions whose primary function is the preparation of barometric indexes showing the trend of business conditions, of which the Babson, Brookmire, and Harvard Review of Economic Statistics indexes are typical instances.

3. Forecasts developed by magazines and periodicals as a regular part of their news service, such as the forecasts appearing in *The Annalist* and also the one which was recently installed by *Administration.*

4. Forecasts disseminated by brokerage houses with a view of aiding their customers in determining the trend of the stock market and the proper time to buy or sell, thus incidentally adding to the total volume of business done by the particular firm.

Indexes classified within the first category are generally impressionistic and make no pretense to scientific accuracy. They simply afford a photographic opinion and pretend to do little more. Their opinion may be derived from a great number of sources or from a very few. Some banks situated in agricultural regions and others in manufacturing or financial districts, issue a monthly letter embodying their own views and those of their correspondents who may be numerous or comparatively few in number. The business trend, for example, will be classed in various districts as "excellent," "good," "fair," or "poor"—expressions which have no meaning except in connection with the significance assigned to them by the user. In other cases an effort may be made to reduce the judgment of the reader to a numerical basis, but even this is frequently based upon personal opinion.

VI

The second category of business indexes presents a more scientific view of business forecasting than any of the others. Working on the assumption that there is a wave-like or rhythmic movement in industry and trade whereby business increases in volume and intensity until it reaches a peak, from which there is a gradual recession to a low level, eventually followed by a resumption of the upward movement, the problem before the forecaster is simply one of measuring or appraising the movement of business in detail. This type of business barometer is to be distinguished from the others by the fact that it represents a very definite attempt to compile an index accord-

ing to scientific methods. Statistics relating to basic business activities are selected and from them business indexes are computed with an idea that from the charts and graphs constructed, showing the movement of the index, the future trend of the business cycle may be determined. The principal assumption is that since the business world is to pass through the same rhythmic movement in the future as it has passed through in former years, there is a possibility, at any given time, of ascertaining about where on the upward or downward movement the business world now is.

To give in detail a description of the type of data collected and the statistical method used in the presentation of the indexes included within this class of business barometers, would entail too lengthy a discussion to be brought within the compass of this article. In a general fashion, the three outstanding business barometric services might be distinguished as follows:

Babson's Business Barometer is obtained by combining the following statistics:

1. A group indicating mercantile conditions based on statistics of immigration, new building, commercial failures, and bank clearings.
2. A group indicating monetary conditions, based on commodity prices, foreign trade, foreign money rates, and domestic money rates.
3. A group indicating investment conditions based on conditions of leading crops, railroad earnings, political factors (estimated), and prices of stocks.

The Brookmire forecast is based upon three graphs as follows:

1. Graph containing a composite of six fundamental factors which are supposed to fall below their average position before the downturn of industrial stock prices and conversely rise above their average position before the upturn of industrial stock prices. This graph has its positions accumulated on the chart so that the height has no significance, but direction of movement has.
2. An average of 20 industrial stocks. The movement of these is forecast by the fundamental graph and they are in turn used as a secondary forecaster for commodity prices and general business.
3. A record of Bradstreet's commodity prices. This graph has no forecasting significance but is carried on the chart only for record purposes.

The Harvard Review of Economic Statistics Barometer is based upon three graphs as follows:

1. Speculation: New York bank clearings, shares traded on the New York stock exchange, and the price of industrial stocks.
2. Business: Bank clearings outside New York City, and Bradstreet's indices of commodity prices.
3. Banking: Rate on 4–6 months paper, and rate on 60–90 day paper.

It will be noted that there is not a wide divergence in the kind of data used in these three barometers. The differences between them revolve largely about the methods used in their preparation.

VII

The third type of business forecast is well exemplified by the barometer of industry and trade recently inaugurated in *Administration*. This barometer attempts to portray graphically the business trend and is based primarily upon five graphs:

1. Price and physical volume index expressing the relation of the general level of prices to the physical volume of trade.
2. Interest rate of commercial paper.
3. Federal reserve bank ratio showing the ratio of the cash reserves of the federal reserve banking system to the total note and deposit liabilities thereof.
4. Business failures.
5. Special commodity price index.

The fourth type of index, being primarily designed for the consumption of clients of brokerage houses, with speculative proclivities, is generally lacking in the accuracy and completeness of data that should typify a genuine business barometer.

VIII

Frank recognition should be given to the fact that as yet there is no general acceptance of the significance to be ascribed to particular groups of data nor any general acceptance of a statistical method to be employed in the compilation of a business barometer. The indexes showing the condition of banking are complete only in so far as they relate to national banks—constituting only one-third of the total number of banks in the country—or to the 800 faithful banks of the federal reserve system—representing only 40 per cent of the entire banking strength of the United States. It has only been within the last year that the indexes showing the activity of credit have been changed so that the figures for the important monetary centers now show the weekly debits to individual deposit accounts, instead of the old clearing house figures which related only to items actually passing through the clearing house. With reference to indexes of production, a vast amount of work yet remains to be done to collect, compile, and present accurate data relating to lumber, coal, petroleum, sugar, leather, shoes, cotton, and wool textiles, paper, etc. The foregoing typical instances illustrate the precariousness of the position of one who attempts to utilize the present incomplete data as the basis for a definite prediction.

From the point of view of handling the statistical data, perhaps the most carefully thought-out plan thus far utilized is that represented in the barometer of *The Harvard Review of Economic Statistics*. The group indexes utilized in the compilation of this barometer represent no decisive contribution to the field of data considered in the construction of barometers. However, the statistical method is more in conformity with the well recognized principles developed by statisticians such as Pearson, Yule, Bowley, Edgeworth, and Galton, and hence marks a distinct advance over the more or less empirical methods applied heretofore in the computation of business barometers. Exact as the science of statistics pretends to be, it is still impossible to eliminate the necessity for exercising human judgment in the grouping of the data used in the statistical computation, and, therefore, the accuracy of method employed by one individual does not preclude another individual from arriving at different conclusions through a different grouping of the self-same data.

IX

The attitude is frequently assumed by self-styled critics of business barometers that the entire procedure leading to the development of such a barometer is so empirical that the final results are to be pigeon-holed in the category of guesswork and not given the credence of a sound conclusion grounded upon undisputed facts derived by a scientific method. There is some satisfaction, however, in the fact that the individuals working in the field of business barometers and forecasts are thoroughly aware of the difficulties surrounding their work and the qualifications that frequently must be made of the judgments reached. Condemnation of business barometers, because of the lack of a uniform statistical method and the wide range of in-

terpretation that may be given to the same groups of data, is as futile as the rejection of diagnoses of medical experts on the ground that there can be no definite answer from an external examination relating to the organic mechanism of the human body. This analogy between business barometers and medicine may be carried further since each is dependent upon the observation of external symptoms for its diagnosis, and upon the reasonable interpretation thereof for its remedial prescription.

X

Business forecasting as a science is in its infancy. Its present development, emphasizing as it does the use of barometers of general business conditions, places it in a position very similar to that occupied by general index numbers 50 years ago. Without in any sense minimizing the importance of an accurate knowledge of the trend of general business conditions, business managers are coming more and more to appreciate the need for a barometer which will correctly depict conditions in their particular line of trade or commerce. It goes without saying that the number of factors and the intensity with which they operate are different in the iron and steel industry than in an hydroelectric development and, consequently, it is difficult for a manager of either of these two enterprises to steer a safe course if he is primarily dependent in his estimate of future business conditions on factors not particularly pertinent to his field. The general barometer and the special barometer each has its distinct field in the science of business and each is complementary to the other. And in an economy where business integration is an outstanding fact and where the complexity of the processes continues to increase, the need is still further emphasized for these special barometers. Until, therefore, special business barometers are more widely available business forecasting is likely to be subjected to the same sharp criticism and suffer a repetition of the failures in the attempt to apply them to practical problems as was experienced by general index numbers.

XI

Much is to be said for a barometer of business which is compiled under conditions fostering an impartial attitude in the collection, development, and presentation of the index. Without detracting from the valuable work which private initiative and enterprise has done in the field of business barometers, there are certain advantages which would accrue to barometric indexes prepared under the direction and supervision of a recognized university. Especially is this true in the case of special barometers. The well-known reluctance of private industrial or commercial firms to reveal the figure-facts of their business might easily be obviated were a university of national reputation to be the focal point for such information rather than a private enterprise. The accusation now frequently made against our privately prepared business barometers—that the integrity of their figures is at times subject to the influence of the pecuniary motives of their makers—could not be advanced with any degree of conviction against a barometer prepared under the auspices of a university, from funds which came from its general budget. The rapid extension of research work into the curricula of our universities in the United States, rendering available a reasonably well-equipped staff, opens a field of opportunity for the development of special barometers which is as yet untapped.

THE USES OF SURETY BONDS IN BUSINESS

BY EDWARD C. LUNT*

THE surety companies collected premiums last year from the American public in the aggregate amount of nearly $60,000,000. Since premium charges are trifling compared with the face amount of the corresponding bonds—a premium of $100, for example, will frequently procure suretyship in the sum of $40,000—it is clear that the American people found it necessary or convenient to use last year an enormous volume of surety bonds. These figures relate, of course, only to bonds bought from surety companies: In addition, hundreds of thousands of bonds in all probability were executed by personal sureties. No accurate statistics regarding personal bondsmen are available, but it is commonly believed that the aggregate volume of such suretyship greatly exceeds the total risks assumed by the bonding companies.

Although corporations and business concerns generally pay to surety companies the bulk of the premium earnings stated, few corporation executives and business men understand clearly the functions and advantages of surety bonds. Fuller information on this subject would tend to enlarge business capacity and heighten efficiency. It is the object of this article to give such information as regards the more important kinds of bonds used in connection with business affairs.

II

Almost all banks, railroads, insurance companies, and similar quasi-public organizations protect themselves and their patrons by bonding either their entire staff (this is commonly done in the case of banks) or at least all members of the staff holding posts of trust, handling cash, or otherwise in a position to defraud their employers. To an ever-increasing extent large corporations and ordinary mercantile concerns not particularly affected with a public interest are following the wise example of the banks and bonding their officers and employees generally. They are doing this, not alone for the positive protection to their assets afforded by fidelity bonds, but also and perhaps equally because of the indirect benefit accruing to the employers of a thoroughly bonded staff in the enhanced efficiency and improved morale of such staff.

This latter aspect of fidelity bonding may not at first be comprehended and properly valued by the average business man, though it seems to underwriters and to employers experienced in fidelity insurance a feature of prime importance. While most executives understand the need of investigating the antecedents of people whom they take into their establishments, and make at least some investigation of new employees, it continually happens in practice that new men are taken on and placed in important posts when their characters and careers, if known, would disqualify them at once for any place in the organization. All fidelity underwriters know, and many experienced business men know equally well how easy it is for even flagrantly dishonest persons to procure letters of recommendation, to cover up the dark

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spots in their records, and to obtain positions of responsibility from employers who take too much for granted or who do not realize how important it is to run down a man's past with the utmost thoroughness before taking him into the service.

No unfortunate deception of this kind is at all possible when a concern bonds its entire staff and never engages any one who is unable to withstand the rigid investigation of a competent fidelity underwriter. An organization that consists exclusively of persons who have been so investigated and found equal to the test is obviously one of which executives may well be proud and in which they may well have confidence. How effective in a pecuniary way, and how satisfactory from the standpoint of staff morale such a practice of universal bonding is may be understood from the fact that surety companies have repeatedly, after undertaking to provide fidelity bonds for a large establishment, reduced the labor turnover materially (after the necessary weeding-out process has been completed) and cut down the losses from dishonesty to almost a nullity. It has taken time, of course, to accomplish such a result, but the effects have been noticeable in a few weeks, and good results have increasingly attended the gradual acquisition of a completely investigated staff.

From the foregoing references to rigid investigations, the withholding of suretyship, and the like, it must not be supposed that the bonding companies do their necessary work in such a way as to embarrass the personnel departments of the concerns that purchase bonds from them. On the contrary, the surety companies take pains so to conduct their operations as to subject those they serve to a minimum of inconvenience. Employees are engaged at any time in the regular way and put to work at once, and are bonded in any desired amount automatically from the beginning of their service by the simple device of notifying the surety company, upon forms furnished for the purpose, of the addition to the staff as of such a date of the named persons. Sometimes, indeed, a bond may be procured that will cover a given *position* or a number of positions, irrespective of the incumbents at any given time. This, however, is a comparatively recent feature of fidelity insurance, and is regarded by many underwriters as an unfortunate development of the business undeserving of exploitation and subversive of the investigating benefits described above. *Blanket* fidelity bonds, covering all employees in a fixed amount ($100,000, say), are quite expensive and are available only for bankers and brokers; that is, no surety companies are willing to issue blanket bonds in favor of any other class of beneficiaries.

III

The cost of fidelity bonds is surprisingly low. It varies with the number of persons bonded, with the nature of their duties, and with other conditions, but a few hundred dollars a year will buy a lot of fidelity protection. A cashier, for example, may be bonded in the sum of $10,000 for $50 a year, or a treasurer in the same amount for $35.

It is happily no longer necessary, as it might have been in the earlier days of the surety business, to warn prospective buyers of fidelity insurance that they must scrutinize their bonds minutely, lest unfair conditions be embodied therein likely to defeat recovery in the hour of need. All the surety companies, generally speaking, issue as a matter of course bonds that are eminently fair to the buyer, and give the latter in clear and unequivocal

language the protection to which he is entitled and which he supposes himself to be getting. This is so partly because the keen competition of the surety companies makes any other course impracticable, and partly because the surety business is now conducted almost altogether by men of broad vision and high character who would not sell an unfair and misleading instrument even if they could, and who have sufficient sense to realize that any such practice would be unwise, and inconsistent with the best ultimate interests of the surety business.

IV

States, cities, and other governmental units are required by law in many parts of the country to procure from banks in which public moneys are deposited bonds conditioned for the payment of such funds upon due demand. The United States government likewise demands security or suretyship from banks as a condition precedent to the deposit of federal funds. How well advised our lawmakers are in protecting public moneys in this way is shown by the fact that the bonding companies have paid to obligees upon depository bonds in the last two or three years, millions of dollars—much more than they have received in premiums upon the same class of risks in that period. Last year, for example, 1921, 40 national banks went into receivers' hands, and 528 state and private banks closed their doors. In some instances, it is true, these banks were afterward reopened; and in many cases, of course, the depositors will ultimately recover a part (sometimes a large part) of their balances. Dividends from this source, however, are uncertain, and at best they drag along for years with the slow and painful disentanglement of the banks' involved affairs.

Though grave embarrassment frequently, and actual insolvency sometimes, have resulted to business concerns from the closing of banks, few executives have thought it worth while to protect their bank accounts by means of depository bonds. Such insurance costs only $5 a year for each $1000—with an average-balance adjustment that may reduce the cost materially—and under some conditions, at least, business houses might find it distinctly advisable to make use of depository bonds. Factories and branch offices, for example, are sometimes located in small and distant places, where the conditions are such that the local bank account may advantageously be protected. When private depository bonds of this kind are taken out, the bank itself is not consulted and knows nothing about the transaction—it is a matter between the surety company and the assured exclusively.

V

It seems clear that business men in general do not realize the importance and practicality and vast benefit to them of a free use of contract bonds. While governmental bodies are not noted for their efficient methods of conducting business, in this respect at least they are many leagues ahead of private business; because it has long been true of the federal government, and is more and more becoming true of state, county, and minor political units, that no important contract is awarded unless a bond guaranteeing the due performance of such contract is first filed by the successful bidder. Enormous benefits have accrued to the obligees of such bonds, as all surety companies know to their embarrassment and sorrow. Countless highways have been built by them, schoolhouses and other public buildings erected, breakwaters

and dams constructed, and any number of other undertakings completed, in accordance with the terms of the original contracts, under bonds that the surety companies were luckless enough to have executed in behalf of defaulting principals.

While a few progressive and expertly managed corporations, and occasionally astute individuals, have made similar use of contract bonds, for some reason the great bulk of building, supply, and other contracts continually awarded in vast numbers in private business are not bonded. Such contracts, of course, are commonly carried out in good faith and with substantial satisfaction to the contractee; but everybody knows how frequently contracts are *not* properly completed, how grievously in numerous cases contractees suffer from such defaults, how often expensive lawsuits form a sad post-mortem of an uncompleted contract.

It is not too much to say that substantially all these unpleasant experiences and heavy losses now sustained by private businesses, apparently as a matter of course, could be avoided by the liberal use of contract bonds. The better grade and more responsible class of contractors would not object to furnishing bonds—they are used to the requirement from their dealings with governmental bodies. The cost of the bond would be added to the contract price, no doubt; but that is not a large item—1½ per cent of the contract price ordinarily—and it would be saved in the long run many times over by the abolition of the annoyance and losses incident to defaulted contracts.

VI

Another special type of contract bond of interest to business men protects owners, mortgagees, lenders, and others interested in real estate against losses due to the paramount liens of material-men and laborers. The hazard referred to and covered by some species of this genus of bonds varies with the laws of the given jurisdiction. A common example may be found in the bond that many life-insurance companies and similar large lenders now require in connection with loans for the improvement of realty. When some borrower applies for a $100,000 loan, for example, and agrees to add to that amount $25,000 of his own and erect upon his property a $125,000 apartment house or business block, the lender, even though his first mortgage is recorded before the building is begun and even though the building is afterward completed in accordance with the specifications, may find, in some states, his security impaired by the superior liens of the people who have provided material for or otherwise helped put up the building. The lender may eliminate all danger of this sort by requiring the borrower to furnish a $100,000 bond conditioned (in effect) that the building shall be erected as contemplated, and that the mortgage shall remain an absolute first lien upon the land and completed structure.

VII

Supply bonds constitute a special class of contract bonds, and are given by the sellers of staple merchandise who agree to furnish their particular product for a stated term or in a stated quantity at a given price. The Navy Department of the federal government, for example, a good many municipalities, and public-service companies to some extent, buy all their coal only from sellers who are able to back up their contract with a supply bond. A year or two ago, when prices were rising rapidly and generally, the fortunate holders of

supply bonds were not at the mercy of the sellers as most buyers were. The case for supply bonds, however, is not quite so simple as that for ordinary contract bonds. The field for them is more limited, and their use in some cases is not so clearly advantageous: under some conditions it is doubtless better to retain one's freedom of action —unless, of course, the contract is so worded as only to give the buyer an option upon the merchandise without requiring him absolutely to take it.

In the foregoing paragraph the point of view is that of the obligee of the bond: Under some conditions a business house may well consider supply bonds from the standpoint of the principal. In selling one's product to new customers, for example, or in foreign countries, or when for some other reason a prospective buyer might naturally hesitate to commit himself, an offer to furnish a bond guaranteeing complete fulfilment of all representations made and obligations assumed by the seller would often prove to be an argument sufficiently effective to close the transaction.

VIII

If A draws a check in favor of B for $100, say, and B so alters the check that the bank pays him $1000 instead of $100, and if B then decamps for parts unknown and is never heard of more, either A or the bank is out $900. Sometimes the loss is A's, because he drew the check so carelessly as to justify the bank's payment of it in a raised amount. Oftener, perhaps, the bank must stand the loss, because it would have noticed the alteration if it had scrutinized the check with due vigilance. Under numerous other conditions banks and their patrons are subject to loss from the outright forgeries of signatures upon checks and from alterations in checks as originally drawn.

Although checks have been thus forged and changed, with heavy resultant losses, ever since banks came into being, it was only three or four years ago that indemnification for such losses became generally available to banks and their depositors. Now, however, a number of surety companies sell at a moderate price ($5 a year for each $1000) policies of insurance so broadly phrased as to afford comprehensive protection against losses of the kind described. These policies, moreover, run in favor not only of the drawer of the forged or altered check, but also of the bank upon which the check is drawn. Since the bonding company has received no premium from the bank, this gratuitous extension of the benefit of the policy to the bank may seem strange. There is, however, a good reason for it: The bonding companies desire to make their policies as pleasing and valuable as possible to prospective buyers, and this feature of twofold protection markedly increases the attractiveness of the policy by eliminating the possibility of embarrassing claim situations. When a changed or forged check is paid by a bank, the circumstances are often such as make the bank liable to the depositor for the resultant loss, and the bonding company in such cases, by indemnifying the depositor, is automatically subrogated to the latter's rights against the negligent bank, and can thus collect from the bank the amount paid to the assured. Perhaps, however, the depositor is a chronic borrower from his bank and must preserve at all hazards his good standing with the bank; and under such conditions he might hesitate to turn over to the tender mercies of a surety company his claim against the bank. No such situation can arise, of

course, if the bank and the depositor are equal and joint beneficiaries under the policy.

IX

Court bonds play their indispensable and beneficent part in our system of jurisprudence for business purposes largely, and it is surely worth while for executives to understand more clearly than most of them now do what judicial bonds are, under what conditions they *may* advantageously or *must* be given, and what underwriting considerations cause bonding companies to provide or to withhold their suretyship in these cases.

There are three parties to every corporate bond—the principal, who is the person or concern that is primarily bound to fulfil the condition of the bond; the surety company, which is secondarily so bound because it guarantees that the principal will discharge his obligation; and the obligee or beneficiary of the bond, upon whose initiative often and for whose benefit always the bond is issued. Up to this point we have considered bonds only from the standpoint of the obligee, whereas in the case of court bonds the other end of the two-pointed instrument is as likely as not to be our location. It behooves us, therefore, to make a fresh survey of the subject from this new, reversed, and perhaps less friendly point of view.

When, for example, one sells a motor truck, a machine tool, a printing press, or a grand piano to a partial-payment purchaser upon conditional sale, and the buyer falls down in his instalments, and the vendor deems it desirable to take back the property, he can do so by becoming the principal upon a replevin bond conditioned to indemnify the conditional purchaser in case the procedure is ultimately found to have been unwarranted. If, again, one's debtor is a non-resident, or has disposed of his property with intent to defraud creditors, or conceals himself for the purpose of evading service, one can often (this device is not so easy as the other) attach the debtor's bank account or certain kinds of other property by giving a bond conditioned to indemnify him in case such proceedings are afterward found not to have been in order.

X

Replevin and attachment bonds are easy to obtain from surety companies under the conditions cited above, because the principals upon the bonds in these cases are the *creditors* in presumably regular and legitimate transactions, so that the debtors in all likelihood will not be undeservedly damaged by the legal processes described. Bonds of *counter*-replevin, however, and bonds to *discharge* an attachment are birds of a different color altogether. If property in your possession has been seized by virtue of some legal writ, and you nevertheless feel entitled to retain it, or if *your* bank account has been attached, and you urgently need it in your business, you can keep the property and still draw upon the bank account, provided you can get some surety company to give your creditor (or alleged creditor) its guarantee that he will suffer no ultimate harm by reason of his releasing his grip upon your assets. Obviously no bonding company will provide suretyship of that hazardous nature unless it believes that it will have in its possession from some outside source, when the case is settled, money with which to pay the judgment that it quite properly assumes will be rendered against you. Unless you are rated by the mercantile agencies four or five "A's" and a few more for good measure, and unless the amount involved is small, you will be expected to deposit

with the surety company cash or the equivalent of cash before it will indorse your note for the amount of the bond.

XI

This insistence on the part of surety underwriters upon receiving collateral sometimes seems unreasonable to the business concerns that have to give financial-guarantee obligations of the kind described. The question comes up frequently in connection with appeal bonds. You lose some suit in the court of primary jurisdiction. Your attorney assures you that the judgment there rendered will be reversed on appeal, and urges you to let him try again in an appellate tribunal. Your adversary, however, as the case stands, has already won, and in order to stay execution by him under the judgment that he has recovered against you, a bond must be given by you in his favor conditioned for your payment of the judgment, with interest and incidental costs, if you lose again in the higher court. While you *may* win on appeal, as you and your attorney confidently believe, the underwriter cannot permit himself to have any reasoned opinion on that point or even to consider the question. It is his obvious duty to take it for granted that you will lose. Upon no other basis would it be in the least practicable for a surety company to engage in the business of issuing appeal bonds.

In order to see this clearly, one must get out of one's mind altogether the idea of *insurance* in connection with court bonds. When a company writes your appeal bond or a release-of-lien instrument, it does not insure you against loss from some mess into which you have deliberately walked and from which you call upon the surety company to extricate you. Not in the least does it do anything of that kind. How in the world could it, for the trifling premium obtained? Accurate statistics are not available, but it is said that the appellants lose in the higher courts as they did in the courts below at least 75 or 80 times out of 100. If, therefore, appeal bonds were written upon an insurance basis, the premium charge would necessarily be 75 or 80 per cent of the amount of the judgment appealed from before even a loss fund were accumulated, and before any provision were made for acquisition and administrative costs. In fact, the premium charge is 1 per cent instead of 75 or 80 per cent. What buyers of court bonds pay for is not insurance in any sense, but is merely *service*; they find themselves in such a position that somebody of recognized responsibility must guarantee their fulfilment of a certain obligation, and the surety company, in return for a comparatively negligible fee and upon the receipt of adequate security, will lend its name to the principal and thus enable the latter to obtain the desired credit.

XII

Several types of bankruptcy bonds facilitate and almost always insure the orderly, efficient, and just liquidation of the affairs of business concerns unfortunate enough to become insolvent. Readers of this article have to do with bankruptcy bonds in two ways:

1. As beneficiaries of such bonds in connection with bankrupt estates in which they are unfortunately interested.
2. As principals upon such bonds when they are elected by creditors or appointed by courts so to officiate.

In the case of proceedings conducted under state laws the initial step is the appointment of an assignee, receiver, or similar official, who takes possession of the bankrupt estate and administers it in the interest of all concerned.

When the procedure is conducted under the National Bankruptcy Law, the first step is the adjudication of bankruptcy, commonly effected through a petition addressed to the appropriate court by three creditors. As a condition precedent to the consideration of their petition these creditors must file a bond with sufficient sureties under which they bind themselves to indemnify the alleged bankrupt in case he is ultimately found not to be insolvent, and to have suffered undeserved injury. Such a bond might seem at first not altogether easy to obtain, since a man's business reputation is not notably enhanced by an unfounded allegation of bankruptcy; but in practice the whole program is commonly understood and approved in advance on both sides—a cut-and-dried affair—and there is rarely any difficulty in procuring the bond. Afterward, if the petition is granted, the bankrupt estate is liquidated by bonded federal officials (trustees and referees) permanently holding office for such purposes, and occasionally by additional fiduciaries, adequately bonded, to care for some exceptional situation peculiar to the given estate.

Assignees, receivers, and like officials appointed under state laws, and special officers of the court functioning under the federal statute, are bonded in an ample amount and upon a broad form of obligation, so that creditors and others interested in the bankrupt estate may not suffer from official wrongdoing. These bonds are regarded by most underwriters as rather hazardous when the persons bonded operate under state laws, because the acts of such officials are sometimes invalidated and the whole situation turned into one of confusion and embarrassment by a subsequent adjudication of bankruptcy under the federal statute. Ordinarily, however, the bonds are readily procurable, because lawyers of high professional and personal standing and business men of well-known responsibility are almost always principals upon such bonds, and they act in any important matter only under the authority and with the sanction of the court.

XIII

In considering the uses of surety bonds to business men we should not overlook one of the most important and valuable, even though it is indirect and negative—namely, their use as a convenient, effective, and wholly reasonable answer to requests for personal suretyship. So much a matter of course has it become in recent years to procure a needed bond through a corporate guarantor that people do not realize how prevalent in times past the practice was of asking one's friends and business associates to sign bonds in one's behalf as personal sureties. It may be said with confidence, though statistical proof is lacking, that thousands of business men were ruined year after year, before the days of corporate suretyship, by their inability to withstand appeals of this nature from principals possessing real or fancied rights to make them. Ties of consanguinity, obligations arising out of business relations, reciprocal favors already received or contemplated, sheer weakness of character—any number of causes underlay and explained the heartbreaking consequences of this practice of signing bonds for others.

No longer need anybody do that. Bonding companies have offices or agents everywhere, and are prepared at moderate cost to meet all normal demands for suretyship. These companies were organized for the express purpose of signing bonds—that is their business, their legitimate and meritori-

ous business, conducted along prudent lines and consistent with the public welfare: it is *not* the business of individuals to assume these hazardous and imperfectly comprehended risks, gratuitously, from motives of friendship or because refusal is difficult. To ask one's friend to sign one's bond for $10,000, say, when the bond may be procured at the next corner for $40, is just about the same thing as asking him to pay one's grocery bill or club dues of the same amount; except, indeed, that the former request would usually be more brazen than the latter. If any unfortunate reader is ever confronted with such an alternative, he will have to go a long way before he will find a wiser or more satisfactory investment for $40 than the one suggested.

XIV

Many minor and occasional uses of surety bonds in business might be cited in addition to the foregoing general functions of such instruments. Importers, for example, frequently find it advantageous to file with collectors of customs, bonds of various kinds that facilitate the entry of merchandise from abroad or postpone the payment of duties or even under some conditions avert such payment altogether. Numerous kinds of business may be conducted in certain localities only after license bonds have been filed with the proper authorities. In many places receivers of freight are permitted by the railroads to remove their consignments without first producing a bill of lading or paying freight charges, provided a bond of adequate amount and continuing validity is permanently filed with them. When income-tax assessments are deemed excessive by the taxpayer or altogether unwarranted, he can cause his case to be reconsidered, escaping immediate payment anyway and perhaps ultimate payment, by filing a suitable bond with the Treasury Department. Under certain conditions, indeed, even an admitted income-tax indebtedness need not be discharged for a maximum period of 18 months after the normal due date, provided the taxpayer is able to give the government a bond conditioned for payment in full upon the ultimate date. These income tax bonds are ordinarily not issued by surety companies without collateral security; but most of the other bonds referred to in this section are written freely by most companies, at moderate cost and without security, for business houses of good standing.

THE ADMINISTRATION OF THE BUSINESS LIBRARY

BY J. H. FRIEDEL*

THE free public library as a means of public education, while it has attained a manifold and intensive development in the United States beyond that in any other country, is not peculiar to the United States. In Germany, in England, and in other countries public library systems exist under some sort of governmental supervision and regulation. On the other hand, the business library movement as it prevails in private, individual, corporate, and quasi-corporate business can be considered only relative to the United States and to no other country. Within the last 10 years and gaining especially from the impetus which the war gave to all informational, statistical, and research activities in the belligerent countries, efforts have been made in a number of these to establish technical, commercial, and similar library systems designed to be of special service to industrialists. In 1915, for example, the Society of Chemical Industry in England adopted a resolution "That the establishment of technical libraries throughout the counties is of urgent material importance." The Committee on Adult Education of the British Ministry of Reconstruction in 1918 pointed to the lack of facilities for technical education and recommended the wider extension of technical libraries in the United Kingdom, a course which was also indorsed by the Privy Council.

In Czecho-Slovakia libraries especially designed to serve the business man have been established under governmental support and supervision and similar instances exist in other countries, but such business libraries where established are essentially different from the business libraries of the United States, since, first, they are under municipal or other governmental administration; second, they are miniature public libraries differing only in that they are confined to a special collection and, third, and most important, the nature of their service as compared to that of the business libraries as they exist in the United States is different.

II

The business library as it exists in the United States is not to be found in any extensive degree abroad. The reason for this is that American industry is, on the whole, more humanitarian, broader visioned, and more scientifically conducted than is industry elsewhere. As a relatively new industrial nation we have not suffered from the conservatism that goes with age, nor the drawback of fixed ideas. It may be charged that the profit-making motive is developed to a higher degree in America than elsewhere, but let it be remembered that profits are not possible without service to the community, to wage-earners, and others directly engaged in industry, and that the profit-making power is closely related to efficiency and contentment within a plant. The business library was established and its development has been fostered because it is in certain definite ways very closely allied to earnings and to earning power.

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In a general and loose way, any collection of books in a business is popularly designated a business library. A junk heap of old catalogues that nobody knows what to do with may be assembled in one place where they will be out of the way and glorified by the name of a library. A collection of assorted state reports and government documents that cost nothing, but look well, mixed with some pamphlets and miscellanies, that give an impression of learning, but really are intended to do nothing else but to impress, may be bunched together and called a business library. But they are not really such. Actually they are simply mongrel collections. The true business library is a collection of books, clippings, pamphlets, maps or reports, printed, written, typewritten, drawn or recorded in some way, gathered and prepared for service. The service does not need to be immediate. Like an engine with steam up that is prepared for work when a hand is laid on the throttle, so may be a collection of books in a business library. But the idea of service, whether immediate or future, is determinative and paramount. The "morgue" of a newspaper office, consisting of newspaper clippings, photographs, sketches, write-ups, partial or complete, statistical tabulations and other material, all organized so as to be available on a moment's notice in answering a special inquiry or preparing a feature story, is definitely a business library and the "morgues" of *The New York Times*, *The Boston Transcript*, *The Atlanta Constitution*, and *The Louisville Courier-Journal* are looked upon as an essential part of the organization. They correspond to the Military Intelligence Division of the army in nature and importance, and no modern newspaper of size and standing is conducted without such a mechanism.

The business library may consist of a general collection or of a collection on a special field or subject. As indicated, the collection need not necessarily be limited to books. It may consist partly or entirely of pamphlets, newspapers, magazines, clippings, photographs, reports, etc. These need not necessarily be printed; they may be written, typewritten, printed, or appear in some other graphic form. Essentially, they are a record of ideas, of life experience, or human observation, or thought.

Furthermore, the business library may exist in every line of activity in which men are engaged in earning a livelihood. We may have agricultural, financial, technical, commercial, insurance, law, medical, or other libraries, but while they may exist in various lines of business activity, they are not necessarily one unified type of mechanism. All business libraries, to be sure, are guided in their operation by a body of library science, developed through many years, whose principles apply in much the same degree to all types of libraries, in much the same way as the operation of all mechanical appliances rests on certain laws of physics. Moreover, business libraries have certain similarities, just as all machines have wheels, gears, and axles; yet just as there are differences between an automobile engine and a Diesel engine, between a cotton spinning machine and a card loom, between a punch press and a lathe, so there are differences between libraries functioning in business, the operation and structure of which must be determined by their purpose and use. A fundamental distinction between business libraries, however, exists, and no one can really be said to understand the business library as it is found today who does not understand and bear in mind this distinction.

III

The business library may be of four kinds. It may be:

1. A welfare library
2. A reference library
3. A research library
4. A personal service agency

The business library of the welfare type is generally installed in a factory or business by the management with no more conscious aim than that it will serve a certain educational and recreational purpose. It is a lending library pure and simple in which the service is measured largely by book turnover or circulation. It is definitely a part of the welfare work and is so looked upon by those in charge of the business. An example of this type of library is "Your Home," the library of the Endicott-Johnson Corporation, which serves as both an educational and social center for the employees of the company. Another instance is that of Marshall Field and Company, at Chicago; here the library has not only books which may be read for pleasure, such as fiction, travel, and general literature, but has also juvenile books which parents may take home for their children to read. In the case of the Southern Bell Telephone and Telegraph Company, whose headquarters are at Atlanta, Georgia, a circulating library is maintained for the benefit of the telephone employees in the nine southern states. Books are sent by mail upon request. The average cost of postage is about 15 cents for mailing and return on each book, and according to the company's educational director, "This is considered as a small cost considering the value that the employees put upon the privilege of using the library."

The business library of the reference type has practically no fiction. Its aim is more definitely informational, since it is intended only incidentally to educate and supply recreation, but more especially to answer questions. It is a reservoir of facts and data to be drawn upon when needed. In such a library the librarian rarely takes the initiative but answers only such questions as are referred to him. A case in point is the library of Wilson and Company, meat packers at Chicago, Illinois, whose library:

> . . . was organized and is maintained for the use of the company employees, to assist them in not only meeting problems which come up in their departments but to enable them to become more familiar with the various phases of the packing industry, thereby preparing themselves for promotion to higher positions, which the many plants and branches of the company are offering to efficient men and women.

The business library of the research type is one in which conscious utility is the dominant characteristic. It is more than a reference library in that it is not only a reservoir to be drawn upon but its scope is wider, and its place as an essential part of the organization is more definitely fixed. Greater responsibility, initiative, and knowledge are required of its librarian. It is more nearly tied up with the planning and profit-making activities of a business. In consequence, its informational resources must be wider, and its work frequently along previously unexplored areas. It may be required to prepare reports and it does not wait for calls for information. It makes inquiries of its own, prepares digests of the results, and may indirectly even make recommendations for departmental or executive action based on the information secured. It is more than a collection or preservation agency.

An instance of such a library is that of the Guaranty Trust Company, New York, of which Mr. Francis H.

Sisson, Vice-President of the company, states:

> The financial library is pre-eminently a working library. Into it are gathered the materials in whatever form the banker needs in the course of his business and that business is today concerned with a multiplicity of activities simply astonishing to the layman. . . . Today the assembling of facts is a task for experts and the field of those experts is the financial library.

Another instance is that of Arthur D. Little, Inc., Cambridge, Massachusetts, one of the leading chemical laboratories in the country. Arthur D. Little, president of the organization, during his presidential address before the American Chemical Society, in which he referred to the place of the laboratory in industrial research, stated:

> These laboratories should each be developed around a special library, the business of which should be to collect, compile, and classify in a way to make instantly available every scrap of information bearing upon the materials, methods, products, and requirements of the industry concerned. Modern progress can no longer depend upon accidental discoveries. Each advance in industrial science must be studied, organized, and fought like a military campaign.

On another occasion he made the following statement:

> I regard the special library as not merely the heart, but the arterial system as well of any adequately organized research laboratory. As it is the function of such a laboratory to extend our knowledge, it cannot function properly unless its working units are strengthened and refreshed and stimulated by the constant stream of facts, theories, and opinions which it is the purpose of the library to supply. Moreover, since research is essentially pioneering, the pioneer should start from the borderland of that great body of organized knowledge which we call science, with which his lines of communication must be well maintained as he advances. The scientific imagination is merely logic in flight, and the flight must start from the solid ground of fact.

IV

The business library of the personal service type is generally installed through the interest of one or more of the executives whom it is designed especially and almost exclusively to serve. It is in a way a private library, and its work is personal and confidential. It may be asked to make personal investigations which will be made the basis of executive action, to write a speech which some official is to deliver, to advise with the executives on matters of organization policy. The persons in such a library are more closely picked and they are more integral parts of the organization than in other types of libraries. Instances of this type of library are to be found in many of the larger corporations of the country.

Each of these business libraries has its particular function, but it can perform that function only if properly administered. For a library is a mechanism designed to serve a purpose. It cannot serve of itself but must be organized and prepared for use. The human mind behind it is essential, but that library serves best where the librarian is least essential to its proper use. Similarly, that library is best administered where the lines of control, though they exist and are recognized, are least apparent.

In the administration of a business library, two major phases exist; namely the technical side, and the reference or service side. The technical side is concerned essentially with the mechanics of librarianship or, as it is sometimes called, library economics. Its aim is primarily to prepare the

library materials for use. It is a task calling for organizing ability, practical vision, good sense, and a knowledge of library technique, and covers such activities as book selection, ordering, accessioning, classification, cataloguing, indexing, and filing.

Obviously, no library can collect all that is printed even in its own specialty. The printing presses turn out so much, and space in a business organization or plant is at such a premium, that no business library can secure and preserve everything in its field. Moreover, not over 10 per cent of modern business literature is worth saving 10 years after its appearance; 90 per cent is displaced or can be discarded. The selection and ordering of material thus comes to be a most important part of any library's work. It must be done intelligently, with a full understanding of book content and book values and precise knowledge of the library's needs. Utility must of necessity be a cardinal criterion. Business is not a philanthropy and expenditure must be justified by a result that is immediate or anticipated. In the welfare type of the business library, the aim is essentially to provide recreation, education, and inspiration. The standards in selection must be high and yet care must be taken not to shoot over the heads of those whom the library is designed to serve. In the reference, research, and personal service types, the library must gauge the demands of the organization and gather everything it can that will make the information itself more accurate and more complete. By correspondence, by personal inquiry and by other means, it should try to supplement the information that it has. The aim in a business library should never be to center on numbers of books, magazines, pamphlets, or clippings, since quantity itself is no criterion of value or service. The aim should be rather to keep a small collection, that will meet all desired needs.

V

In selecting and ordering books, the business librarian must be familiar with book prices and values, discounts, book markets, and conditions in the book trade. He must know, in short, what to buy, when, and where. Good personal judgment is necessary but in addition the librarian may have recourse to abstracts, digests, and reviews by competent specialists. Recognized sources for these exist. In some concerns it is the practice to order all books, pamphlets, and other desired materials through the central purchasing department rather than for the librarian to order direct. Whatever the method pursued, the best for the least in the quickest time should be the controlling principle in book buying as it is in all purchasing. Selection in itself is of little avail unless proper methods of ordering and subsequent care prevail. In many libraries an order-record, noting outstanding orders, and an accession-record, noting chronologically books in order of receipt, are kept.

To be used with ease, library materials must be grouped in some systematic manner. Were they arranged simply in order of accession or receipt, there would be no definite relation among them and their use would necessitate scanning every shelf. To separate books, magazines, papers, maps, and other library materials according to their likeness or unlikeness is to take the first step to facilitate their use. While classification according to color, size, language, author, date of publication, name of publisher, etc., is possible, classification by subject is most frequently employed in practice,

since most persons are interested in a subject and such an arrangement brings together all material on a given topic in a single place where it can be readily consulted. A number of standard classification systems, such as The Dewey Decimal, The Expansive, The Adjustable, and The Library of Congress exist. Each has its place and advantage, but frequently in a highly specialized business collection it is advisable to work out a classification suited especially to the particular need. In the preparation of the classification system thorough familiarity with the field to be covered and a knowledge of the interrelation of the subjects involved are essential. The classification system should be logical, scientific, and definite. Its various divisions should have a definite relation to each other and to the whole. It should be arranged in descending order of importance, should not permit of overlapping of subjects and, in addition, have a system of notation and an index.

When a book has been classified, it should be properly marked, so that its place and order on the shelves may be fixed, and it should also be properly catalogued. The catalogue is perhaps the most important working tool in the library. It is a list of materials in the library so arranged as to answer three types of questions:

1. What book or books by a given *author* does the library have?

2. What books on a given *subject* are in the library?

3. Who is the author of a given *title?*

The catalogue may be written, typewritten, or printed, be in book form or on cards, and contain various descriptive details designed to give an idea of the book. The most common and best approved practice is to have the catalogue arranged on cards, filed alphabetically as in the dictionary, with a card for author, subject, and title of each book. To bring out special parts of sections of a book, index cards may be prepared and filed in the catalogue. The catalogue should be complete, accessible, and easy to use.

The material having been secured, classified, and catalogued, the next task is to see that it is used. This comprises the second major phase and constitutes the real test of any library. It should be understood that the average librarian is a technician, trained in the principles of library management, that he is not an economist, statistician, or research expert and that, as a rule, his greatest asset is his familiarity with sources of information. Some business librarians of an exceptional type, by diligent study and application secure a mastery of the field with which they deal. This, when combined with a practical sense of the needs of the business and its problems, an attitude of scientific analysis and study, and a vision of what lies ahead of the organization, so that proper preparations can be made to meet situations before they arise, makes them invaluable assistants and advisors.

But it should be recognized, however, that such persons are the exception and not the rule. The average librarian is purely a technical worker, with a desirable expertness in the organization and use of library materials. While practice in various business libraries may vary, the principles upon which the technical work of the library rests are fairly well determined. Most important in the business library is the person in charge, since upon him depends the attitude of the company and its employees to the library as well as the service which the library is prepared to give.

VI

Business libraries have been instituted, as indicated, to serve either the company executives or the rank and file. Their primary purpose has been to organize the wealth of printed and other informational matter relating to a particular business or industry, or group of industries, so that it can be available as an effective aid or tool in daily work. The modern business manager or executive, if he hopes to succeed, must know not only the technical details of his own business but must have a knowledge of the general developments in his industry and a respectable familiarity with other matters. He must know something of financing and accounting and a great deal about production and marketing. It should be recognized also that business procedure in itself is becoming constantly more and more scientific. In order that the management, its supervisory assistants, and employees may avail themselves of the advantages which improved methods make possible and increase the prosperity of the business, they are more or less under necessity of keeping informed of what is going on. Furthermore, to meet successfully the competition of other concerns, the methods of the manager or administrator must be as good as theirs and his information in the aggregate no less.

The wide range of printed matter and the large quantities in which it is produced make it impossible for any business man to wade through it all. Furthermore, the average business man has but little time for reading; information coming to him must, therefore, be brief, yet complete, accurate, definite, well organized and be available quickly on demand. The procuring and organization of this material is essentially the task of the business librarian.

THE PREPARATION OF OFFICE CODES

BY FREDERICK E. REIN *

PART II—SIMPLIFYING THE CODE

WHEN a list of all the items has been prepared and numbers assigned, with adequate allowance for future additions, parts of the code may contain more units than are necessary or advisable. Every item that calls for a unit in excess of the average item, or majority of items, should be studied carefully for the possibility of exceptional layout. In most cases the exceptional items will yield to careful planning, and can be provided for practically and satisfactorily without assigning additional units. Whenever an additional unit is assigned to exceptional items, it must at the same time be assigned to all other items which are included in that part of the code.

To illustrate this point, consider that part of a sales code which refers to description of the product. Assuming that a majority of the items can be expressed by a code consisting of six units, viz:

Grade	*Model*	*Size*	*Style*
00	0	0	00

and that the description of six of the items includes an additional element known as *type*, viz.:

Grade	*Model*	*Size*	*Style*	*Type*
00	0	0	00	0

then seven units are necessary to complete the code for these six exceptional items. If seven units are used to express the latter code, the same number of units must be used in the former.

* Industrial Engineer.

The exceptional items may be provided for satisfactorily, however, in the six-unit code in either of two ways:

1. By assigning the next consecutive style number to identify both style and type
2. By assigning the next consecutive grade number to identify both grade and type

The application of the principle of exceptional items illustrated by this example offers opportunities for effecting important economies.

Another simple and instructive case is found in the coding of a location:

State	*County*	*Town*	*Population*
00	00	000	0

In every state in the United States, except Texas, the counties may be provided for by two code units as shown in the above code. There are 245 counties in Texas which, under ordinary circumstances, would require three units in the code. By treating Texas as an exceptional state it is possible to avoid adding a third unit to the county element of the code in all the other states. Texas may be assigned three state numbers, 42, 43, and 44. There are then 99 counties assigned to state number 42, 99 counties to state number 43, and the remaining 47 counties to state number 44.

These illustrations show how a careful study of the information will reveal methods for taking care of the exceptional items.

II

Characters and letters are extensively used in almost every branch of industry, and are most frequently encountered as parts of symbols used in reporting sales, production, labor turnover, expense, and similar facts. Their use in most cases is largely the perpetuated practice of earlier periods, and very often inconsistent with modern ideas. It is not unusual to find an improperly planned system of applying symbols continued in use for many years that has gradually grown to impractical length and complication. Such a system could be simplified readily, but is continued because of an unreasoning dislike for change on the part of the managers, or because it is regarded as indispensable to the continued success of the company, or simply because the subject has not been given any attention.

When either characters or letters, or both, are a part of a code, the cost of compiling statistics is increased in proportion to the additional time required for secondary coding, secondary de-coding, and to the reduced speed of punching and verifying. Accuracy may be sacrificed because the addition of these secondary operations increases the opportunity for errors. In all code layouts, every possible attempt should be made to avoid characters and letters and to employ strictly normal codes, that is, codes which consist exclusively of figures and which permit of normal and efficient operations in making and proving the compilations.

The punching, verifying, sorting, and tabulating machines, so essential to statistical compilation, can record or add numerals only. Characters and letters can be used only as special features and necessitate a double operation of interpreting and translating. In the first place they must be translated into numbers for assignment to definite positions on the tabulating card and for positions on the sorting machines. Then the figures recorded by the indicating wheels or printed by the listing type of the tabulating machines must be translated back into the characters or letters. These processes of translation and re-translation are known as secondary coding and secondary de-coding.

When the code consists of numbers only, the primary operations of compiling are:

1. Coding—entering the code number
2. Verifying—verifying the code number
3. Punching the tabulating cards
4. Verifying the tabulating cards
5. Sorting
6. Tabulating
7. De-coding—interpreting codes into descriptions, names, etc.

When characters or letters, or any combination of the two, are a part of the code, the primary operations become:

1. Coding—entering the code number
2. Verifying—verifying the code number
3*A*. Interpreting characters and letters into numerical positions
3. Punching the tabulating cards
4*A*. Interpreting characters and letters into numerical positions
4. Verifying the tabulating cards
5*A*. Interpreting figures into characters and letters
5. Sorting
6*A*. Interpreting figures into characters and letters
6. Tabulating
7. De-coding—interpreting codes into descriptions, names, etc.

Operations 3*A*, 4*A*, 5*A*, and 6*A* are the additional operations made necessary by the use of characters and letters in the code; of these operations 3*A* and 4*A* are the secondary coding operations, and operations 5*A* and 6*A*

are the secondary de-coding operations.

Operations *5A* may precede or follow operation 5, depending on the layout and manner in which the characters and letters are used. Operations for the sorting needle, as well as the rearrangement of the cards, may be found necessary under some conditions.

The punching and verifying clerks will be delayed by operations 3*A* and 4*A*, referred to in the above paragraph. The additional time required will be determined by the number of numerical positions on the tabulating cards occupied by characters and letters.

Where not more than one column on the card is devoted to characters and letters, expert operators may memorize the positions and lose little, if any, time by reason of operations 3*A* and 4*A*. Additional columns devoted to characters or letters increase the problem of committing the position numbers to memory. Possibilities of error are greatly increased as the number of operations increase in which memory is relied upon to supply any of the details.

Speed in punching and verifying is too often responsible for unreliable statistics. If accuracy is to be maintained, the speed of punching and verifying must be reduced by operations 3*A* and 4*A* in proportion to the number of characters or letters involved. Operators must consult the code for the numerical positions corresponding to them.

III

When using all the letters of the alphabet in the codes any one of the following four methods may be used:

				20 10	
0—O	O	O	00	0	0
1—A	J	S	11	1	1
2—B	K	T	22	2	2
3—C	L	U	33	3	3
4—D	M	V	44	4	4
5—E	N	W	55	5	5
6—F	O	X	66	6	6
7—G	P	Y	77	7	7
8—H	Q	Z	88	8	8
9—I	R		99	9	9

Method No. 1. Three columns on the tabulating card must be assigned in order to provide a numerical position for each letter of the alphabet, e.g., to record the letter A, position 1 in the first column, O in the second column, and O in the third column must be punched; to record the letter J, O in the first column, 1 in the second column, and O in the third column must be punched; to record the letter S, O in the first column, O in the second column, and 1 in the third column must be punched, and so forth. With this method 26 letters require the same space as 999 items. Two columns are sacrificed on every card punched and two additional sorting operations are made necessary on the sorting machines.

Method No. 2. Each letter of the alphabet is assigned a number corresponding to its numerical order in the alphabet, e.g.:

A—01	H—08	O—15	V—22
B—02	I—09	P—16	W—23
C—03	J—10	Q—17	X—24
D—04	K—11	R—18	Y—25
E—05	L—12	S—19	Z—26
F—06	M—13	T—20	
G—07	N—14	U—21	

Two columns of the tabulating card must be assigned to permit recording the code for 26 letters. Two columns ordinarily will provide space for 99 items.

Each letter recorded must be punched in two columns, e.g.:

Letter A—01, D—04, N—14, Y—25, etc.

One column is sacrificed on every card, and one additional sorting operation made necessary on the sorting machines.

Method No. 3. Each letter is assigned the same code number as in Method No. 2. The X and R positions are used to express tens and twenties, so that the two-unit code can be recorded in one column on the tabulating card. To record letter E, position 5 is punched. The letter K and all subsequent letters except T (code 20) must be recorded by two punchings made simultaneously; for example, letter P (code 16) must be punched in the numerical positions 6 and 10 (X position); letter V must be punched in numerical position 2 and 20 (R position).

There are several objections to the use of this method, first of all, it is not good practice to depress two keys on the key-punch simultaneously. Errors too often result, especially when the operator is not thoroughly trained. In the second place, a sorting operation is necessary for each hole punched in a column, two sortings are required for columns in which two holes are punched. Finally, in as much as the X and R positions do not indicate on the indicating wheels of the tabulating machines, the normal proof of the tabulations is sacrificed and possibilities of error are increased.

Method No. 4. The line drawn between figures 4 and 5 in the illustration of Method No. 4 indicates a split column or a split field, which permits punching two numerical positions in one column on each tabulating card.

A special code must be adopted assigning two positions to each letter of the alphabet. The first position must be in the upper half of the column, the second position in the lower half.

The accompanying diagram illustrates the method of assigning code numbers. The number vertically above each letter supplies its first unit, while the number horizontally to the left supplies the second unit.

	X	0	1	2	3	4
5	A	F	K	P	U	Z
6	B	G	L	Q	V	
7	C	H	M	R	W	
8	D	I	N	S	X	
9	E	J	O	T	Y	

A = X	G = 0	M = 1	S = 2	Y = 3
5	6	7	8	9
B = X	H = 0	N = 1	T = 2	Z = 4
6	7	8	9	5
C = X	I = 0	O = 1	U = 3	
7	8	9	5	
D = X	J = 0	P = 2	V = 3	
8	9	5	6	
E = X	K = 1	Q = 2	W = 3	
9	5	6	7	
F = 0	L = 1	R = 2	X = 3	
5	6	7	8	

The same objections are found in this method as in method No. 3.

IV

The X and R positions are often referred to as the blank positions, and also, as the eleventh and twelfth positions. They appear above the figures of each column on the tabulating cards, and in a similar position in the sorting machines.

The normal use of the X position is to indicate that nothing is recorded in either a topical or an adding field. The X position is punched in the first column of such fields and is known as a "skip" in the punching operation.

When sorting the last column in any topical or adding field—the first column to be sorted—all cards which are normally punched in the X position in such fields will be placed automatically in the X box on the sorting machine. This permits the separation of these cards from the other cards in the pack, and saves the time of passing them through the sorting machine more often than is necessary when the other columns in those fields are being sorted.

The R position is never punched except in cases of special layout. It corresponds to the R or reject box on the sorting machine which, in normal layout, receives all cards not punched in any column being sorted. This would occur with cards on which one or more fields were skipped—not recorded—or on which, through some error, a hole was not clearly or completely punched.

The X and R positions on tabulating cards, as shown in the accompanying illustration, can be used for sorting only. They will not indicate on the tabulating machines.

It may be necessary to make use of both these positions abnormally, where characters and letters are a part of the code, especially when the information to be recorded requires all the columns on the tabulating cards.

R
X
O
1
2
3
4
5
6
7
8
9

Recourse to the sorting capacity above the 10 numerical positions, like an overload on any kind of equipment, is undesirable and should be avoided wherever possible.

The principal objections to the abnormal use of the X and R positions are:

1. The clerk recording the tabulations is prevented from making normal comparisons of the code numbers recorded. The columns in which the X and R positions are punched do not indicate on the indicating wheels.

2. Before the amount of a tabulation can be recorded opposite the code number, the clerk must refer to the cards to be tabulated, and read the code number from the punched record. This operation requires more care than is exercised by the average clerk and frequent errors are likely to result.

V

The foregoing exposition should have indicated that both accuracy and economy may be sacrificed when characters and letters are used. Fortunately, their use can be avoided in most cases. The initiative and ability of the statistician usually determines whether the codes will conform to the golden rule of code layout—"Normalcy." The codes for statistical compilation should not be confused with practices in cost analysis. The former frequently permit of entirely disregarding established product numbers, and applying normal codes to names and description. The policy of the statistician should be to render the maximum of dependable service, at the least possible cost consistent with efficiency and continuity of such service. Accuracy and economy of operation are the very life of such a policy.

A very thorough study of the entire code problem is the first step in the direction of a normal code. What was? What is? Why is it? How can a normal code be applied? These questions must, under most circumstances, be answered properly before a normal code can be adopted. Even though finally it may be necessary to sacrifice some of the numerical positions to characters and letters, proper study of the entire code problem should, as suggested result in reducing materially the number of those undesirable features.

VI

The tabulating card (Hollerith Card) is mono-card-record of transactions and results. A series of vertical columns of the arabic numerals from 0 to 9, the zero at the top, is printed across its face. The spacing of these columns both horizontally and vertically conforms to the spacing of certain mechanical elements of the automatic machines used for recording and compiling. The distance between the columns is 5/32 inches, giving slightly less than six-and-a-half columns to the inch, and the vertical spacing is such that the numerals of the different columns form horizontal rows, every number being the same distance from the top and bottom edges of the card as every other figure of like denomination. The cards are made in two standard sizes, the larger with 45 columns, the smaller with 34. A card in its original blank condition, with nothing on it but the numerals, is known as a skeleton card. It becomes a tabulating card when laid out and printed to record particular transactions and results.

Records are made on the cards by punching holes through the numerals corresponding to the code numbers for the particular information to be recorded. The holes are punched with a device known as a key-punch, somewhat similar in operation to a typewriter. In the case of certain information, such as dates, for example, which is common to a number of cards, a gang-punch may be employed. By the use of this appliance as many as 10 cards may be punched simultaneously.

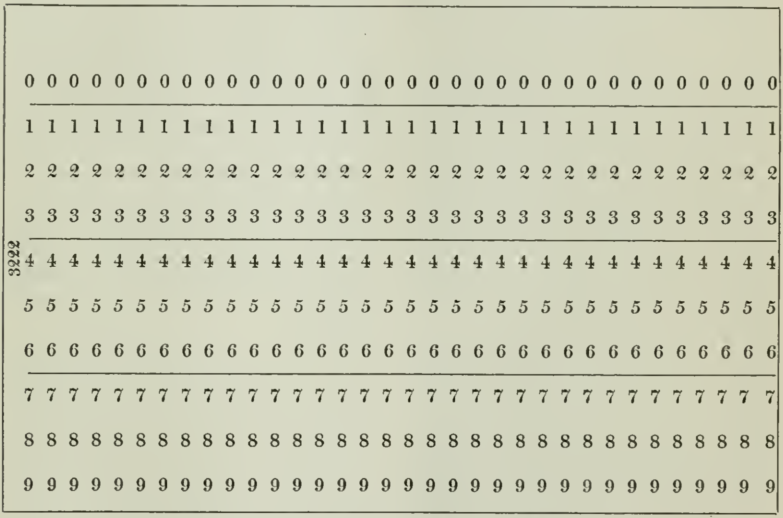

FIGURE 1. THIRTY-FOUR COLUMN SKELETON-CARD

Each part or group of the information is assigned one column on the tabulating card for each unit in its code. In some cases of special layout it may be necessary to record two or more units in one column. Such an arrangement, called a split column or split field, should be avoided if possible.

Each group of information to be recorded is referred to as a "topic," and the columns on the tabulating cards used to record each topic are known as a "field." The fields are separated from each other by heavy vertical lines printed on the cards.

Fields used to record dates, locations, dealers, descriptions, causes, are known as "topical fields." Fields used to record quantities and amounts are known as "adding fields."

The illustration of the skeleton card shows a space between the first row of numerals (0) and the top of the card, sufficient for printing two additional rows of numerals as well as the names of topics. Provision is made on the punching devices and sorting machines for recording and sorting these two additional positions or rows, and they are known as the X and R positions (sometimes called the eleventh and twelfth positions). They can be used only in topical fields or in adding fields only as sorting positions.

The upper left corner of the tabulating card is cut off, making a double corner. This is done to prevent the possibility of a card being placed in a pile with the wrong side up or with the bottom edge where the top should be. Whenever any card is wrongly placed in a stack, one of its square corners will extend beyond the double corners of the other cards and at once attract the attention of the operator.

VII

Accuracy, speed, and flexibility of recording and compiling facts and figures are the primary purposes of tabulating cards. These cards are arranged so that the punched records may be automatically sorted and summarized by machines, and re-sorted and re-summarized into the necessary groups of information for various current records and reports. They may also be used for compiling special reports showing analyses and re-analyses of sales, production, labor turnover, and many other items.

Completion of the reports soon enough to meet requirements, so essential to present-day management, is a secondary purpose of the tabulating cards. The automatic machines perform the operations of recording and compiling in a fraction of the time required by manual methods. In many industries the manual methods are now impossible because the length of time required for recording and compiling makes the reports of little or no value when completed, as they are too late to meet the principal requirements of executives and managers.

Certain limitations of the different machines used for recording and compiling must be considered in laying out the tabulating cards, if simplicity and economy of operation are to be attained.

In the first place, the first, second, and third columns of the card will not indicate on the tabulating machines, and should therefore be used to record dates (month, day, and year). For special layout, where dates must be recorded in X and R positions, such groups of information as identifying numbers, invoice numbers, and report numbers should be assigned to these columns. Another point to be considered is that the X and R positions do not indicate on the tabulating machines, and when used in normal layout should be confined to columns one, two, and three. These positions (X and R) when used in special layout are ordinarily confined to topical fields, although under exceptional conditions they may also be used in the adding fields as sorting positions.

The adding heads on the tabulating machines are limited in capacity to

eight columns, and operate only in ten positions or rows (0 to 9). Adding fields on the cards must, therefore, be limited to these capacities.

In normal layout only one hole is punched in each column of the tabulating cards. In cases of special layout, two or more holes may be punched in one column in topical fields.

This practice should be avoided if possible as it necessitates giving special attention to the punching and sorting operations. It cannot be applied to adding fields.

Columns to be gang-punched should be confined, as far as possible, to the left side of the card, as the cards are fed into the punch from the right side and punched from left to right.

Columns to be key-punched should be arranged on the right side of the card. In this operation the card is placed on the carriage of the punch at the left of the punching mechanism. The carriage is then moved to the right until the first column to be punched is under the punching pins and the cards punched from left to right.

When columns to be key-punched are all to the right of gang-punched columns the normal movement of the carriage need not be interrupted.

When any part of a card is not to be punched this space should be arranged in the center of the card with the gang-punched columns on the left and the key-punched columns on the right. This condition is frequently met with in practice when the central part of the card is used for original records or full capacity of the card is not required.

VIII

Special layout consists of planning additional recording positions on the tabulating cards, when more than 45 holes are required to record any transaction or result. The X and R positions, the splitting of columns in the topical fields, and the use of the forty-fifth column as a topical and split field, are the resources for additional recording positions. Such arrangements are always disadvantages and should be avoided if possible. When conditions necessitate the use of special layout careful study should be given the problem in order to select the method that will cause the least complication in the operations of compiling.

The number of holes in excess of 45, required to record the transactions or results, will determine the number of columns that must be resolved into X and R positions and split columns. However, average conditions requiring special layout may be provided for satisfactorily, without recourse to split columns, by recording the dates (years, months, and days) in the X and R positions on left side of card, and using as many numerals in the forty-fifth column as may be required for the remaining positions. When this method is used the dates can be punched with the gang-punch, all the other holes operating normally with the key-punch. The automatic spacing mechanism of the key-punch stops when the forty-fifth column is reached, and for this reason any number of positions can be punched in that column in whatever order desired.

Sorting positions are sometimes located above the adding fields, but only under exceptional conditions. The adding fields should be used exclusively for quantities and amounts, exceptions being made only after all the other resources have been utilized.

Several examples of the application of special layout which have proved serviceable are here given.

In Figure 2, years and months are located in the X and R positions, making two additional columns available for recording other information.

20 22 24 Year 21 23 25		1 3 5 7 9 11 Month 2 4 6 8 10 12		
Day 0 0	P 0	Location 0 0 0 0	Dealer 0 0 0 0	0 0 0
1 1	1	1 1 1 1	1 1 1 1	1 1 1
2 2	2	2 2 2 2	2 2 2 2	2 2 2

Figure 2

22 Year 21 23	1 3 5 7 9 11 Month 2 4 6 8 10 12	2 (Tens) 1 3	1 3 5 7 9 *Day* (Units) 2 4 6 8 0	
Invoice No. 0 0 0 0 0	Customer 0 0 0 0 0	Location 0 0 0 0 0		0 0
1 1 1 1 1	1 1 1 1 1	1 1 1 1 1		1 1
2 2 2 2 2	2 2 2 2 2	2 2 2 2 2		2 2

Figure 3

In Figure 3, in addition to years and months, as in Figure 1, the days are also located in the X and R positions. The three positions assigned to tens in days are in a separate field from the ten positions assigned to units. Four additional columns are made available by this layout.

In Figure 4, one column is gained by placing the tens above the units for days, and two columns, by locating months and years in the X and R positions.

In Figure 5, numerals 1, 2, and 3 in the first column are used to record tens in days; the numerals 4, 5, 6, 7, 8, and 9, not needed for recording the tens in days, are used for recording years. The first column as arranged provides space for an additional topic ordinarily requiring an entire column. This illustrates the arrangement of a split column.

In Figure 6, the first column has been split as in Figure 5, numerals 4, 5, 6, and 7 being used to record EC, expense collect; EP, expense paid;

	2 Day 1 3	1 3 5 7 9 11 Month 2 4 6 8 10 12	20 22 Year 21 23
	0	Report No. 0 0 0 0	Ter'y and Dealer 0 0 0 0 0
	1	1 1 1 1	1 1 1 1 1
	2	2 2 2 2	2 2 2 2 2
1626	3	3 3 3 3	3 3 3 3 3
	4	4 4 4 4	4 4 4 4 4
	5	5 5 5 5	5 5 5 5 5
	6	6 6 6 6	6 6 6 6 6
	7	7 7 7 7	7 7 7 7 7
	8	8 8 8 8	8 8 8 8 8
	9	9 9 9 9	9 9 9 9 9

Figure 4

	Day		12 Mo 11	
	0	0	10	0
	1	1	1	1
	2	2	2	2
1626	3	3	3	3
	21	4	4	4
	22	5	5	5
	23	6	6	6
	24	7	7	7
	25	8	8	8
	26	9	9	9

Figure 5

	21 23 Year 22 24		1 3 5 7 9 11 Invoice Month 2 4 6 8 10 12	1 3 5 7 9 11 Entry Month 2 4 6 8 10 12		
	Day 0	0	Town 0 0 0 0 0	Customer 0 0 0 0	Invoice No. 0 0 0 0	0
	1	1	1 1 1 1 1	1 1 1 1	1 1 1 1	1
	2	2	2 2 2 2 2	2 2 2 2	2 2 2 2	2
1626	3	3	3 3 3 3 3	3 3 3 3	3 3 3 3	3
	EC 4	4	4 4 4 4 4	4 4 4 4	4 4 4 4	4
	EP 5	5	5 5 5 5 5	5 5 5 5	5 5 5 5	5
	FC 6	6	6 6 6 6 6	6 6 6 6	6 6 6 6	6
	FP 7	7	7 7 7 7 7	7 7 7 7	7 7 7 7	7
	8	8	8 8 8 8 8	8 8 8 8	8 8 8 8	8
	9	9	9 9 9 9 9	9 9 9 9	9 9 9 9	9

Figure 6

FC, freight collect; FP, freight paid. Numerals 8 and 9 are unassigned.

Years and months are located in X and R positions with provision for recording both the month in which invoice was rendered, and the month in which entry was made in the books.

In figure 7, one column is used for recording year, month, and day. Years may be designated simply as odd and even years in order to identify the current cards from those of the preceding year. This is accomplished by assigning numbers 1 to 12 to the months in odd years and numbers 13 to 24 to the months in even years.

The column is split, the upper field R —1 —2 —4 —8 —16 being used for recording days, the lower field R —1 —2 —4 —8 —16 for recording months.

From one to five holes are punched in each field according to the number of the day and month. The sum of the numerals punched in each field must equal the numeral of the day or month to be recorded.

The first position R, in lower field, is punched on every card in addition to the above. This is done so that the rejected cards will all be deposited in the number 4 box.

The complication of sorting cards punched in this way makes the plan highly undesirable. However, when used only for purposes of record it may be satisfactory provided the column is located at the left end of the card so that it can be gang-punched.

In Figure 8, one column is used for recording month and day. The column is split, the upper field 1 —2 —3 —4 —5 —7 being used for recording months, the lower field R —1 —2 —4 —8 —16 for recording days. Days are punched as in Figure 7, the months as follows:

R	
1	
$^{2}0$	0
$^{4}1$	1
$^{8}2$	2
$^{16}3$	3
$^{R}4$	4
$^{1}5$	5
$^{2}6$	6
$^{4}7$	7
$^{8}8$	8
$^{16}9$	9

FIGURE 7

1	
2	
$^{3}0$	0
$^{4}1$	1
$^{5}2$	2
$^{7}3$	3
$^{R}4$	4
$^{1}5$	5
$^{2}6$	6
$^{4}7$	7
$^{8}8$	8
$^{16}9$	9

FIGURE 8

DAYS				
	1	5	8	31
R				
1	0	0		0
2				0
4		0		0
8			0	0
16				0

MONTHS				
	2	9	18	24
R	0	0	0	0
1		0		
2	0		0	
4				
8		0		0
16			0	0

MONTHS												
	1	2	3	4	5	6	7	8	9	10	11	12
1	0					0		0				
2		0							0			
3			0							0		
4				0							0	
5					0	0						0
7							0	0	0	0	0	0

A C
B D

Product				Terms		
0 0	0 0	0 0	0 0	0	0 0	0
1 1	1 1	1 1	1 1	1 NET	1 1	1 CITY
2 2	2 2	2 2	2 2	2 REG	2 2	2 SUB
3 3	3 3	3 3	3 3	3 A	3 3	3
4 4	4 4	4 4	4 4	4 B	4 4	4 MFR
5 5	5 5	5 5	5 5	5 C	5 5	5 CON
6 6	6 6	6 6	6 6	6 D	6 6	6
7 7	7 7	7 7	7 7	7	7 7	7 CL
8 8	8 8	8 8	8 8	8 PP	8 8	8 LCL
9 9	9 9	9 9	9 9	9	9 9	9

Figure 9 Figure 10 Figure 11

In Figure 9, four special features added to certain items of the product are coded as A, B, C, and D. The record is assigned to the X and R positions for two purposes.

1. Special features are exceptional, and by placing them in the above positions, the punching and sorting of an additional column is avoided on the majority of the records where the special features do not appear.
2. One column additional is made available for the recording of other topical information.

In Figure 10, the last column is used for recording terms and prepaid shipments.

Net = 30 days
Reg. = 2/10 n/30
A = net 60 days
B = net 90 days
C = 5 per cent S/D—B/L attached
D = net S/D—B/L attached
PP = charges prepaid

In Figure 11, the last column is used to record three different groups of information pertaining to shipments:

1. To city or suburb
2. To a manufacturer or contractor
3. To carload or less than carload shipments.

There is an advantage in using the last column for the items shown in Figures 10 and 11 rather than locating the information in the regular topical fields, preceding the adding fields. The carriage of the key-punch is released from the automatic spacing mechanism when the last column of the tabulating card is reached. Any number of the positions in this column may then be punched, one hole at a time.

IX

To summarize the operations performed in laying out the cards I have arranged them in six steps.

1. Determine the sequence in which each element and sub-element of the codes for each kind of transaction and result is to be recorded. The order in which the information appears on the original records should be followed wherever possible.
2. Determine the total number of columns necessary to record all the information concerning each transaction and result. Enough columns must be allowed for quantities, amounts, order numbers, etc., to provide for the largest items appearing on the records.
3. Adopt a card with sufficient columns (45 or 34 columns) to record the transactions and results requiring the greatest number of columns.
4. Lay out a card for each kind of transaction and result.
5. Study the card layouts to determine the possibilities of applying one layout to

JOHN DOE AND COMPANY

SALES—MANILLA ORDERS RECEIVED—BLUE

Year	Mo	Day		Report No.				Sheet No.				Territory and Dealer				Med		Terms	Discount	Quantity				Description							Gross Value							Net Value						
																X			X					Size		F	Kind Style		P	G	X							X						
21	12 11 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
24	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1626 25	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
26	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
27	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
28	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
29	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
30	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

FORM M4

FIGURE 12

two or more kinds of transactions and results.

6. Determine the number of kinds of forms of the cards that will be necessary for recording all the information. Prepare specimen cards. Decide upon the colors of cards. Order electrotypes and cards.

When the recording of any group of information requires more columns than the number of columns on the cards, a special layout may become necessary.

X

As interesting examples of successful tabulating and layout I have selected two specimens from the forms in use by the John Doe Company. The first of these, Figure 12, is a mono-card-record of sales and orders received. The second, Figure 13, is a dual card record of employment separations in which a carbon copy of the original entries on the accompanying Figure 14, "Leaving Notice," is incorporated into the body of the card.

The fourth and fifth topical fields "Report No." and "Sheet No.," provide a means for checking the quantities and values shown on the Identifying Summary accompanying each report, with the tabulations made from the cards, after they are punched. When the totals do not agree, the proofs may be made page by page, the total of each page being compared with tabulation of the cards covering the items on it. The gross-value-field will permit special tabulations for reports that may be called for in connection with changes in trade discounts. The seventh and ninth fields, "Medium" and "Discount," will not be used on all transactions. The "X" position shown in these fields provides for normal skip punching.

The same electro may be used in printing this form for both the sales and orders received cards. Two colors of cardboard are used as indicated on the specimen.

The records of separations for the labor turnover report are punched from the leaving notices. Figure 14 was designed for the following purposes:

1. To avoid the handling and maintaining of a separate code record.

2. To permit the entering of code numbers on the leaving notices when they are first written.

3. To provide a carbon copy on the tabulating card, and to make possible the punching of the record on the same card.

The first and second purposes are accomplished by printing the code of causes on the bottom of each copy of

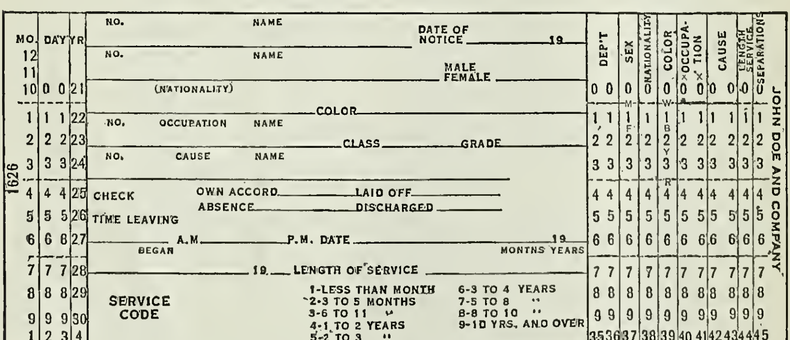

Figure 13

the leaving notice. The employment manager is responsible for entering the correct cause number.

The third purpose is accomplished by making up pads of the leaving notices in sets, with the tabulating card as the last copy.

An examination of the tabulating card, Figure 13, which precedes, will show that when it is placed in position under the leaving notice it will extend to the right beyond the edge of the upper form while the latter will extend beyond the tabulating card at the bottom. All the writing lines, however, will be in perfect alignment. The left end of the tabulating card, for the punching of dates, will be under the printed matter on Figure 14.

All the information to be tabulated appears on the body of the card as a carbon copy of the original record made on the leaving notice. The facts are arranged in the order in which they are to be punched, to facilitate the tabulating operations. The recording of nationality, color, and occupation provided for in columns 38 to 41 is not necessary for compiling the routine reports, but may be required at any time in the preparation of statistics for special studies.

LEAVING NOTICE

NO. NAME

FROM DEPT. ____ DATE OF NOTICE ____ 19__

NO. NAME

WORKER NO. ____ MALE FEMALE ____

NATIONALITY ____ COLOR ____

NO. NAME

OCCUPATION ____ CLASS ____ GRADE ____

NO. NAME

CAUSE ____

HOW LEFT-CHECK OWN RECORD ____ LAID OFF ____

ABSENCE ____ DISCHARGED ____

TIME OF LEAVING ____ A.M. ____ P.M. DATE ____ MONTHS 19__ YEARS

EMPLOYMENT BEGAN ____ 19__ LENGTH OF SERVICE ____

SIGNED ____ FOREMAN ____ EMP. MGR.

01 CARELESSNESS	06 GRIEVANCES	11 LOAFING	16 SICK
02 DEATH	07 HOUSING CONDITIONS	12 MARRIAGE	17 STRIKE
03 DISSATISFIED	08 INCOMPETANCY	13 MOVING	18 WAGES
04 DISTANCE FROM PLANT	09 INDIFFERENCE	14 NO REASON	19 WORK LACKING
05 DOMESTIC AFFAIRS	10 INSUBORDINATION	15 OTHER POSITION	20

Figure 14

FOREIGN INVESTMENTS AS TRADE ASSETS

BY ALLAN B. COOK*

HAVING tasted the profit to be had from export trade and finding it to their liking, American merchants and manufacturers naturally wish to continue this diet, but find that the rations available are somewhat meager in comparison to those of recent years. The problem confronting them is to find the method or methods which when used will stimulate their exports. Before it can be solved, it is necessary to understand why foreign customers are not buying in former quantities. Briefly these foreign customers find that they are doing less domestic business which curtails their buying power and also that they are faced with financial handicaps when purchasing from the United States. As their shelves become bare, the first obstacle will be removed. Current orders indicate that this condition is actually making itself felt at present.

The investment of American capital abroad offers a satisfactory solution of the financial difficulty. To intelligently apply this method, however, it is essential that we know why such use of funds creates trade; the national benefit to be derived from this type of investment; and also what our European predecessors in this field have done in the past in order that we may follow along the trail which they have blazed.

II

Picture a country rich in natural resources in the form of minerals, timber, and fertile soil, but lacking either the capital or initiative to turn these undeveloped assets into the channels of active production on any large scale. The world's knowledge that there are deposits of gold, silver, and copper ore does not in itself enable the population of that land to purchase goods, for the hope which nature's gifts naturally engender must be translated into the concrete before the tide of commerce will flow strongly toward such a country.

How can the ore and timber in the interior of a new or backward nation be made to give monetary returns if in an isolated section? Only by furnishing adequate means of transportation and machinery which will bring the metal and lumber to a central distributing point from which other nations can supply their wants of this character. As these natural products go forth, in return the producer receives cash for further development of his properties or for such use as meets with his pleasure, but in any event the importation of materials and wares for sale to him will result.

The nitrate beds of Chile, the silk industry of China, and the mines of South Africa all furnish capital which their citizens spend for American automobiles, British textiles, etc. As the business man, farmer, or laborer creates a surplus in cash over and above that required for the barest sort of existence, the variety of merchandise increases which can be sold to them. For example, many Mexican peons' first purchase of what is in their eyes a luxury, is a pair of shoes, thus creating a market for that article which previously was non-existent and which would not have come into being if the productivity of the soil, mineral, and

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oil deposits had not been accomplished. It is evident, therefore, that a nation's commerce must of necessity wait upon its economic development and that its trade will be large or small as that process is hastened or retarded.

III

The foreign government, city, or corporation which requires money for constructive purposes finds when negotiating with British bankers in London that there is usually a string tied to any offer of assistance which may be made by the English financiers. This is the requirement that when the bonds have been issued and sold to investors, the proceeds are not to be paid in cash to the borrower for withdrawal from the country and expenditure elsewhere, but that instead such funds are to remain in England for the purchase of the materials involved in the project which is the basis for the loan.

In this way, the banker has retained a choice bit of business for English manufacturers, which otherwise might go to American, French, or German competitors. This restriction often extends further and requires the foreign debtor to employ English engineers when railways or power plants are to be built and mining development is to be effected with British money, even stipulating that technical experts of that nationality are to be left in control of the operation of the completed property. When this occurs the material needed for replacement purposes or for any expansion will naturally be secured from English factories.

At other times even when the loans obtained by foreign nations or their subdivisions are required primarily to place their treasuries in funds, the lender often insists that a certain portion if not all of the money be spent in his own country, which again means the sale of that land's wares abroad.

As this is written, there is an ever-growing plea on the part of American commercial organizations, that our bankers take a leaf from England's book and prevent the use of our capital for the purchase of goods from European sources with a consequent strengthening of the competitor's position in such foreign markets and loss of trade to us.

IV

Another type of investment is that based upon a foreign concession secured by a company permitting it to develop oil and mineral deposits in return for a fee or royalty to the government from which the concession is secured. These products are exported as well as sold domestically in the foreign country, thus increasing not only its purchasing power at home but also in the world's markets.

The Standard Oil Company, the Chile Exploration Company and others engaged in work of this nature naturally fill their requirements almost entirely from American sources, while similar English, French, German, and Dutch companies, for example, buy at home and ship their purchases to the foreign destination. The familiarity with the manufacturers of any country which foreigners thus gain has a tendency to spur their desire for similar articles for their own use. The desire of the Cuban to own an American-made fountain pen or safety razor, for example, is due in great degree to the fact that he sees such things used by those of our citizens with whom he comes in daily contact locally. Our drop forgings, machine tools, etc., have to some extent found their way abroad because Japanese, Australians, and others know from practical operations either in the United States or in their own lands

that these products fill certain industrial requirements.

By far the greatest part of American capital in the foreign field is invested in Canada, Cuba, Mexico, and the Philippines. Practically all of our large manufacturers have established Canadian factories to supply that market with their product. The result is that our northern neighbor buys the bulk of its merchandise from such concerns and others in the United States. This trade movement is offset partially by large importations by us, for we consume a tremendous amount of raw stuffs from that source annually. Canada may, therefore, be said to turn its eyes commercially and economically toward us rather than across the seas. If English firms had built plants there on the same scale, Canada would then look eastward and not to the south.

With regard to Mexico the oil wells, silver mines, and ranches were to a large degree the result of the pouring of American funds into that country with the same effect as in the case of Canada, for our goods are bought there both by Americans and Mexicans practically to the exclusion of those of other foreign origins.

The development of the sugar industry of Cuba was made possible through the investment of our capital there, and this market in consequence absorbs American merchandise almost entirely. The Philippine Islands' progress has been achieved in much the same manner and the products of this country fill its shelves.

In all these places if the German, British, or some other nation's investment were greater than ours, international trade would be altered in accord and our presence in such markets correspondingly reduced. To the extent that we apply this same attitude with regard to other parts of the world our foreign trade is bound to benefit.

V

So much for the broad general principle involved. There are, however, certain other factors to consider in this connection. If a nation is a large exporter but imports only in relatively small quantities, in normal times the consequent favorable balance of trade thus created is settled by shipments of gold to the creditor. Assume that the debtors lack the necessary yellow metal or cannot spare any portion of their supplies, and that no bullion moves across the seas. The result of this breakdown of normal economic methods is a movement of exchange rates favorable to the exporting country and unfavorable to its foreign customers. The harshness of this action is limited only by the force of the trade situation itself.

This can best be illustrated by the conditions which followed the World War, for during the period of actual conflict and for practically two years thereafter obligations due us abroad were piling up. The sum total of our actual surplus of goods exported plus governmental loans to allied nations and other foreign issues sold in our investment market ran into and still maintains a staggering figure. The premium of the dollar abroad and the heavy discount of foreign currencies in New York tend to prevent the purchase of American products on any large scale other than such necessary raw stuffs as are vital to the life of debtor lands.

An American low-priced automobile selling for $1000 cost a buyer in Paris in 1913 but 5000 francs. With the depreciation in French exchange which the war caused, the same machine in 1920 was equivalent to approximately 18,000 francs. This difference of 13,000 francs is exclusive of any increased duties, for we have eliminated that from our

thought in this example. It is a simple matter to understand why not only American motor cars but our products in general went to France in ever-decreasing quantities.

An even more striking instance may be had, for in Bucharest, Roumania, a similar car caused the purchaser to make an expenditure of 6000 or so leu, who today would have to pay approximately 100,000 leu for this article. No more need be said to show why our trade in Central Europe is stagnant.

Because of the discount on sterling in terms of the dollar, during this same period England had a preferential in exchange of 35 per cent at the maximum in 1920 for sales of goods to France in competition with our own products. The position of German exporters in this respect was even more favorable as regards this specific point. This meant and still means that the balance of the world can purchase the products of other lands than our own at lower prices. The result of such a condition cannot help being self-evident.

If international trade settlements must be made in gold or funds secured from the sale of goods, our debtors naturally are forced to bend their efforts to greater exports and fewer imports. In one way only can we retain our export trade and yet assist a rapid return of exchange to normal. The solution is the investment of American capital in the securities of foreign nations, provinces, and industries. This is the equivalent of an import movement of bonds and shares on our part and thus offsets the debts owed us for the time being.

By thus delaying payment over a considerable period of years the world is granted a breathing spell in which to recover economic equilibrium to the advantage of all concerned. If we insist upon an early settlement we are virtually making our competitors a gift of our foreign markets, and are setting obstacles in the path of the American exporter which only superhuman efforts will overcome.

This is not a plea for speculative investment in unsound securities issued abroad, for that in the final analysis is at best merely charity misapplied or foolishness as one chooses to view it. It is an attempt to indicate the desirability and even necessity for the utilization of whatever capital resources we can safely spare to hold our place as one of the leading trading nations.

Artificial regulation of exchange rates, and other panaceas which have been offered as the instruments with which normal conditions may be rebuilt, are in reality a series of mirages created by the intense desire to cure the evil. If put to the test and in a small way, as some have been at one time or another, conditions grow worse, or at best are only prevented temporarily from becoming so. In the long run strict adherence to economic laws alone will right matters.

VI

When any country has flowing to it annually large sums of money in settlement of interest due its holders of foreign securities, there is present an invisible factor upon which it can count to assist in reducing any unfavorable trade balance caused by a greater amount of merchandise imports than similar exports. If during some year a number of bond issues mature, the payment of the principal further augments the total of the invisible exports and may create a final international balance favorable to the investing country even though the movement of goods has been actually against it.

England is the best example of the

value of such payments for, normally a large importer, her excess of that character is actually offset by money owed her abroad and thus in the end shows a balance on the right side of the ledger. Looking into the future, there may come a time when we buy much and sell little internationally, and then our need might be met as is England's now. It is unlikely that year in and year out we will retain our present type of trade balance.

VII

American railroads and industries in the past relied largely upon the capital supplied by European investors for their development. Our first-class bonds so purchased were held in foreign strong boxes and represented several billions of dollars loaned to American corporations. In more limited degree, preferred and common stock went into these same safes, for the opportunity for attractive investment at home was not in proportion to the supply of funds for that purpose.

While the greatest proportion of British capital so invested here was placed in our railroads, public utilities, and industries, there was also a large sum diverted to mining and lesser amounts to agriculture and stock raising.

Practically all of the railways, mines, and public utilities in South America owe their existence to the necessary capital which was supplied from London. In South Africa, the gold and diamond mines are British-owned, and in Asia the control of the tea industry and of oil-producing territories rests in the same hands to a large degree. In China and Egypt again the English investor looms large and also in Australia and New Zealand.

Hollanders have invested in the sugar plantations of Java, in rubber and coffee both there and elsewhere, and have spread their more limited capital about the world. France loaned large sums to Russia, the Levant, and to a certain extent has placed its money in both the eastern and western hemispheres. German investors apparently specialized in Spanish, Swiss, Italian, American, and South American ventures, but also appear as holders of almost every conceivable type of security of both Oriental and Occidental origin.

Our position as a debtor nation prevented our investors from paying more than passing and fitful attention to foreign securities prior to 1914, for they found attractive domestic issues in which to place all available capital. Furthermore the few instances, of which certain Russian Imperial and Japanese Treasury bonds serve as illustrations, in which we did step out of our beaten path, saw the market for these foreign issues centered abroad with consequent delay and difficulty attending the sale by holders here.

The educational foundation supplied by loans made by our public, in the form of bonds bought during the World War from foreign governments through banking syndicates in this country, created an interest in foreign securities which has apparently assumed permanence. The result has been that for the past few years and at the moment ever-increasing amounts of government bonds of European and South American origin are being sold in our investment market. Industrial securities of the same type, De Beers Consolidated Mines for example, have been absorbed in modest amounts.

It is fortunate for the United States that this is true, for it assures us that we shall retain our proper position among the world's trade leaders. To the same degree that our capital is diverted into this channel will we secure permanence and relative stability in the sale of our products abroad.

REDUCING RAILROAD CLAIMS

BY NEILL HUTCHINGS*

CLAIMS against carriers are demands for payment of loss by shortage or damage. By their very nature, claims are never cheerfully received and gladly paid; nobody loves a demand for payment. A bill is honorable, a dun is objectionable, but a claim can easily become obnoxious.

The cost of claims to business is tremendous. Their preparation is an involved proceeding requiring complete statements of all essential facts, together with affidavits, etc., in support. Thousands of business concerns employ experts to supervise their preparation and collection, while the transportation companies, against whom most claims are made, in turn maintain expensive departments for defending, analyzing, and as far as possible preventing payment until their justice has been established beyond a reasonable doubt.

This must not be construed as criticism of the transportation companies, for it must be conceded that a claim, in its very nature, is susceptible of error from many angles. It would not be right to pay a claim until every means of investigation to ascertain its fairness has been exhausted. If for no other reason, this should be done to locate the trouble and employ means for its correction.

As a matter of fact a large percentage of claims may very easily contain elements of unfairness. To start with, those originating claims are always pretty good at claiming enough. The principle underlying their preparation is something like that of *caveat emptor.* This is perhaps one reason why the receivers of claims are quick to read between the lines the faulty features, and enter into correspondence, etc., with the makers of the claim in a combative rather than cooperative spirit.

I am trying to make it clear that claims are too numerous, too burdensome, and unnecessarily costly to business. I believe they can be reduced in number by careful study of the elemental factors involved.

The central aim of those having claims to prepare should be to make no unwarranted claim; in other words, to confine claims to valid demands, supported by clean-cut and undeniable facts. No good business man or firm should countenance half-baked claims. Debits to claim accounts should be such as good accounting practice will sustain as good assets. To have a claim refused or compromised reflects unfavorably on the maker.

The prime elements to be studied with the idea of minimizing claims are:

1. Packing goods for shipment
2. Properly marking and routing
3. Physical handling at receiving point
4. Counting and recording
5. Comparing receiving records with bills

The first two while of much importance as affecting claims will not receive our immediate study in this article. This will be left to those who ship goods of whatever kind. It is enough to say that many a claim is made necessary as the result of loss from poor or improper packing, crating, etc. The same applies to mark-

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ing and routing. It is also true that many claims really caused from poor packing have been made against carriers when the fault really lay with the shippers. Especially have enormous losses accrued on export shipments because of too little care in packing goods for long voyages and strenuous handling. These two factors are the responsibility of manufacturers and shippers.

The remaining three factors we will take up in order, for these combined vitally concern our subject, and if thoughtfully considered will help us achieve our aim—the reduction of claims.

II

Physical Handling at Receiving Point. By physical handling is meant everything connected with receiving goods except the clerical work as—counting, recording, and comparing. Physical arrangement is highly important. Visualize a storehouse or warehouse where goods and supplies are received and stored. Do you see clearly in the picture you form a definite section set apart for receiving? Unless you do, the picture is perhaps true to conditions too frequently seen, but altogether bad. It is a common weakness of many concerns—even some of the best ones—to fail to provide proper storage facilities for valuable materials. Naturally where this is true an expenditure for still more room for use as a receiving section only is too rarely considered. But after all, the success of a business depends on the fellows working for it; so the man in charge as storekeeper or warehouseman can overcome this. If he is smart enough he will simply proceed in some way to make for himself a receiving section; i.e., a place where all incoming materials are temporarily placed when unloaded from cars or trucks. The rule must be laid down and followed that this space cannot be used for any other purpose. It should be so arranged that theft is difficult.

If practical, the thing to do is to rail or fence off the receiving section from the storeroom proper. Nothing received should be permitted to leave the receiving section, no matter how badly needed, until the goods have been examined for breakage, shortage, etc., and proper record made by the receiving clerk. It often happens that a certain item received is so urgently needed that the man who is going to use it is standing by when it comes in, picks it up, and goes off with it before the receiving records are established. It is checked short and a claim made which will be canceled later. This door can be effectually closed by using the proper receiving system.

When goods arrive at the receiving point the first step should be to carefully inspect them to see if the general appearance indicates any damage. Where received in railroad cars, the railroad agent should be present before the car is opened to note if seals are broken and to observe, with the receiving clerk, the condition of the contents of the car. If there is any apparent damage these two (the railroad agent and the receiving clerk) should jointly note and record:

1. Condition of the car as to roof, etc.
2. Condition of contents as showing signs of rough handling in transit.
3. Record fully condition of damaged goods.

Where machinery is received requiring bracing or bolting to the floor of the car, it is very important to note and make a joint record of the character of bracing and bolting; if wood bracing, what size and kind of wood. (I remember a claim where the shipper

swore 4 x 4 inch bracing was used, and the railroad inspector later on said the bracing was rotten lumber 1 x 4 inches. As the lumber used for bracing was destroyed long before the claimants really got into action nothing could be proved and the claim was finally compromised.) It is necessary to note how the bracing is fastened, bolted, or nailed, and what size bolts or nails are used. All of these factors, while they sound small, are first-class favorites in arguments affecting validity of claims.

After this general inspection is made, the actual physical handling begins. All package goods showing signs of damage should, if possible, be opened in the presence of the railroad agent. If he cannot be present the damaged box and contents should be carefully set aside until he can see it. There will be no trouble at this point if the receiving clerk has the confidence of the agent. He will cheerfully take the receiving clerk's word that the box when shown him is just as received. Care should be taken to have the agent see the damaged goods as soon as possible.

The manner in which material is unloaded is sometimes a claim element. This is especially true of delicate machinery, etc. It is the responsibility of the receiver to use care in unloading such. A big piece of plate glass wholly enclosed in wood can be broken in unloading, and when unboxed, the break is ascribed to the carrier and claim made. A good plan is to let the railroad agent see you unload such items and satisfy himself that no breakage occurs.

Again, do not let material stand around too long unopened. I recall some plate glass which was not needed when received. To remove the packing would subject it to needless risk. It was judged intact and put away on edge securely braced. When opened later half the contents were broken. Claim followed. The carrier said it was received in good apparent condition. This was admitted and offered as counter evidence that it must have been damaged in transit. Pro and con it went until finally compromised. What should have been done was to open the box at the time of receipt. If found broken at that time, the claim would have been verified by the agent and promptly paid.

The features of physical handling will, of course, differ everywhere, but the principle of studying all the points involved and using every care to handle in a thorough way will, if followed consistently, be the means of saving certain claims altogether and eliminating faulty features from those that are made.

III

Counting and Recording. The average receiving system is faulty for:

1. Failure to apply the right principle of counting and recording receipts.
2. Lack of a receiving form fully adequate for recording all essential facts.

There are two general plans for counting and recording. One is to have the invoice at hand and to check off the items received against the invoice. The other is to count, weigh and record, using no papers such as invoice or shipping memorandums. In other words to create an absolutely original record of what is received. I am greatly in favor of the latter plan; it forces the receiving clerk to record what he actually gets. In the absence of any papers telling him what to look for, he is automatically made to create an original record. The difference in the two systems is this: When a man has a bill or packing memorandum to use, he seemingly cannot help but be guided by what the papers call for,

both as to number of items and weight. The psychology of it is that when he has a bill calling for 14,800 ½ x 3 inch bolts, he will give more weight to what the bill calls for than he will to carefully counting and recording what he finds. If there seems to be one package shy he will argue to himself—"The bill must be right and I miscounted one"—so he checks it O. K. The same is true of weights. If his weight comes close to the weight on the bill he ascribes the variation to difference in scales and checks the billed weight. As for overages he is even more prone to overlook these.

Now, put the receiving man "on his own," let him have no papers, as bills, etc., and in addition tell him he must pay no attention to packing slips (these, however, should later be attached to his receiving record). Then he has to get down to cases and count or weigh very carefully, for he knows that later his count will be checked with the invoice, and, moreover, he feels much more keenly the importance of care in his work, as affecting his job. You will not find a receiving clerk working under this plan, throwing away packing material such as excelsior, until he has combed it thoroughly to see if any small packages are left in it.

As to the receiving form, this is highly important. First of all it should be big enough to fully record all essential facts including complete detail of items received. With a good form completely filled out for every receipt, the receiver is well armed to support a claim if one is necessary. It automatically makes a rceord very hard to dispute. The form exhibited on page 315 should bevery satisfactory. It must be studied and every caption used; if this is not done it loses its worth. In size it should be 8½ x 11 inches though it can be shorter than 11 inches if desired. The 8½ inch size is readily filed.

In every case the number of packages received is highly important to record. Where the carrier's bill differs in this respect, note should be made on the face of the receiving form.

All of this is mechanical. Both principle and receiving form will fail unless vitalized by a good receiving clerk. The men who do the work make successes or failures of principles and forms. As you are reading this, please remember that your receiving record is the basis for paying your real money to shippers and carriers. Who is your receiving clerk and what are you paying him? He should be an alert, live individual. If possible he should be a man who likes receiving work. Nearly every one likes to open things. There is in every box or package a latent appeal to open and see what is inside. Find that man in your organization who will answer that appeal intelligently, who will carefully discover the hidden secret and record it clearly on paper, and you have the right man. Go a step further, if possible, and find a man who will be content with that job—pay him well and he will be. Do not forget you are hiring a man here to tell you how much you shall pay out. He, plus system, will pay dividends in lessened claims.

IV

Comparing Receiving Records with Bills. The right principle of receiving, that is, the creation of an absolutely original receiving record, implies the comparing of this record with invoices to verify corrections and bring to light discrepancies.

The receiving forms when made up are turned over to the invoice clerk daily—oftener if desired. Where shortage appears or damaged condi-

________________ COMPANY

RECEIVING MEMORANDUM

No.________ Date Rec'd. ________

Order No. ________

Received from * City State

Ordered from * City State

Received via Car Initials Car No. Charges PPd. or Collect Amt.

Gross Wt. Tare Net Weight Condition of Packages Condition of Goods

Packed In Kegs Boxes Bbls. Bdls. Reels Carboys Bags Sacks

" " Cylinders Loose Pieces Disposition

Remarks

QUANTITY	DESCRIPTION	WEIGHT, COUNT OR MEASUREMENT
	* Material is often ordered from one firm and received from another. The Receiving Clerk fills in top line. Order No. will give name ordered from - filled in by Invoice Clerk.	

Checked with Invoice by Received by

Invoice Clerk Receiving Clerk

MEMORANDUM OF GOODS RECEIVED

tion is reported, the responsibility for determining whether this is the fault of shipper or carrier rests upon him. If the receiving form does not fully bring out all necessary information for determining whether deduction should be made from the shipper's bill or claim made against the carrier, the invoice clerk should get in touch with the receiving clerk and establish the facts. Naturally where the receiving clerk has secured the agent's exception on freight bills, a claim is in order. The point to be made here is that the final responsibility for creating a railroad claim rests with this man. It is at this stage that the work of a good system and a good receiving clerk is demonstrated. We may have failed to say sooner that when a receiving man believes shortage or damage was due to the fault of the shipper in packing, etc., he will make such notation; hence the invoice clerk gets advice that deduction from the invoice is in order with a letter of explanation to the shipper, instead of setting up claim against the carrier.

Here so-called astray shipments should be considered. A material factor in lessening claims is to establish a rule that claims for shortages will not be actually submitted for a period of two weeks. In this time items short often come in on astray billing. This saves submitting a claim as well as the embarrassment of having to withdraw it later by acknowledging receipt of goods claimed.

Further, when claims for shortage are made, the receiving clerk should be given a memoranda of the items short with the name of the shipper, so he can be on the lookout for them. Very often material will come in without any marking to indicate the identity of the shipper, which can perhaps be reconciled with such memoranda. Then advice can be furnished the carrier that goods have arrived so claim can be withdrawn.

After all is said and done, the whole subject boils down to a matter of *fairness*. If viewed fairly, it is simply a matter of being decent to each other. No decent shipper wants to short change his customers; the carriers want to deliver your goods in good order. But the receiving party has to pay both shipper and carrier. His pocketbook is touched hardest, and it may be a mite harder for him to view fairly shortages and damage. But if he will, and if he utilizes every factor at his command for lessening the number of claims made against carriers, and will see that those made are fairly made, he is rendering service to business as a whole as well as serving his own interests best.

AXIOMS OF INDUSTRIAL EFFECTIVENESS—II

BY C. E. KNOEPPEL*

THE greatest volume of business goes to that firm whose prices reflect normal operating conditions.

It is becoming more and more apparent to industrial leaders that the relation between costs and prices is not that which has been generally supposed.

In 1907–1908 the writer undertook the developments in a Western Pennsylvania plant, making a highly complicated product and operating a structural shop, machine shop, foundry, woodworking shop, and forge shop. The sales manager asked that attention be given to the cost system. He stated that when business was good, with the plants operating at full capacity, or greater than full capacity, through overtime, night, and Sunday work, the cost figures were so low that usual profits added to them resulted in prices much *lower* than he *knew* he could *get* for his product, with the result that he *ignored* the costs and fell back on judgment, guesswork, and his knowledge of about what the trade would pay.

On the other hand, in slack times, depressions, and seasonal dips, when the plants were operating at 50 or 60 per cent of capacity, the cost figures given him were so high that any profits added to them no matter how small, resulted in such excessive prices as to make it *impossible* for him to get business if he used them, and again he was forced to fall back on judgment, guesswork, and his knowledge of about what the trade would pay.

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Author's Note: In the preceding article eight axioms of industrial effectiveness were discussed in detail. The four remaining axioms are given in the present article.

He had found that there was only one condition under which he could depend on the cost figures furnished him for use in setting prices, and that was when the plant was operating at normal capacity.

What he had been trying to do in good times and bad times in so far as he was able, was to figure about what costs would be if the plant had been operating normally, and then use these figures as his basis, as to him both good times and bad times were *abnormal.*

In other words a product may cost no more in labor and material, whether operating at 50 or 200 per cent of capacity. Should the overhead cost be twice in the one case and one-half in the other, as related to production? If so, why? No more or no less money may be spent in the one case as against the other in overhead, therefore if there is no change in labor and material costs, and the volume of production is the fluctuating factor, then cost is constant and any amount over and under this constant, the difference being due solely to more or less volume, should be reflected in a way to link it up with volume or capacity, the matter of volume being up to the sales end of a business and not the production end.

Costs of a product may be no greater or less when operating below or above normal capacity; it is figuring which makes them greater or less.

The above clearly justifies this procedure—determine normal capacity (70 to 90 per cent of full capacity) in hours of machine and working places (not in dollars of sales, tons, or units

of production); standardize the overhead expenses and determine what normal rates really are, and use these rates in both costing and price-making.

II

Manufacturing economy and efficiency, not speculation, form the real basis for price and profit-making.

A manufacturing friend of mine made $100,000 in one of the war years. Of this, $60,000 was made through shrewd buying of materials considerably in advance of his requirements. Inasmuch as this man spends about 10 per cent of his time in directing the purchasing and keeping himself posted in market conditions, it means that in 10 per cent of his time he made $60,000 while in 90 per cent of his time he only made $40,000 on manufacturing, the point of which is clearly obvious—*he made more as a speculator than as a manufacturer.*

Two manufacturers recently told me that in following my advice with reference to the volume factor and the purchasing factors, they were amazed to find out upon analysis, that the profits they had made in the past were not due to manufacturing efficiency, but to purchasing and material manipulation, or to selling way beyond their capacity.

One of the large rubber companies sustained a terrific loss in 1920 due to being caught with a lot of high-priced materials on a falling market. During the past year concern after concern was forced to write off large losses due to depreciation in material values. Should there have been these losses? Is not there after all something fundamentally wrong with our modern accounting when it comes to this question of materials?

A firm buys material at a certain price, say $200, which is the cost. Let us assume that at the time of *use* the price becomes $300. If it is put into work-in-process at the cost of $200, then $100 is lost which might otherwise be made, although the inventory is in adjustment. If put in at $300, the price which the company did not have to pay, then a fictitious figure is used and the inventory is out of balance by $100 although an extra $100 has been made in profit—purchasing profit.

If at the time of use, however, the price is $150, and the cost is considered at $200, the inventory is in adjustment, and no loss will be made, but the chances are that there will be no sale due to the excess value of the material over the market price. If put in as work-in-process at $150, however, then not only is there a loss of $50 to be taken (a purchasing loss) but the inventory would be out of adjustment as well.

From whichever angle you view it, therefore, it is extremely difficult under the usual plan of handling to reconcile cost and market values, keep inventories properly adjusted, and properly take care of profit or loss entries due to purchasing.

If space permitted, the evil effects of uneconomic and speculative purchasing could be elaborated upon. To buy large quantities of material on a low market results in undue stimulation in business when a sufficient number of concerns indulge in the same practice. To delay buying when prices are high, results in depressing business. Both of these steps contribute in no small measure to lack of stabilization in industry.

To properly reconcile the differences between cost and market prices, to properly visualize the results of speculation, and to assist in stabilizing industry, this conclusion is therefore advanced—put materials into inven-

tory at the time of *receipt* at *cost* value; and into work-in-process at the time of *use*, at *market* value, clearing the inventory of the cost value and localizing the differences between cost and market values.

III

What a product should cost in direct labor is the real direct cost, and not what the usual figuring says it cost, as any difference is waste, and waste should not be reflected as a part of direct cost.

If a crane chain breaks while a casting is being taken out of a machine, and both casting and machine are smashed, should the loss be charged to the job being worked on? If a moulder accidentally drops a large core into a mould while attempting to "set" the core, and destroys both mould and core, should the extra work be charged to the job being worked upon? If a regular operator can make a piece of work, day in and day out, in 4 hours of time, and on a day when he is sick, the substitute takes 5½ hours, is this 1½ hours a legitimate part of the cost?

If you answer these questions in the affirmative then it follows logically that you would be willing to pay the price of two suits of clothes, if your new suit was spoiled in the making and had to be replaced by a good suit.

In other words, if a product can be made at a direct cost of $4, it should not cost more, and if an extra dollar is spent on the work its direct cost is not $5. What does this extra dollar represent? If the $4 is a correct figure, then the extra dollar represents inefficiency and inefficiency does not belong to direct cost at all, as it is a variation from normal, due to trouble, or an accident, or waste, an exception which should be localized so that all can see it.

Therefore, to treat waste and inefficiency so that it will be properly set up on the books, standard direct labor costs should be put in work-in-process, and the difference between standards and actual should go into a waste or inefficiency account, so that manufacturing efficiency can be truly gauged.

In connection with this matter of standard direct labor costs, the principle just stated was presented by me before the Federal Trade Commission, May 6, 1918, in the contest between the manufacturers of newsprint paper and the newspaper publishers. Its statement on this occasion was as follows:

> To place the burden of inefficiency and waste on the shoulders of those who produce it or are responsible for that condition, so as not to include it in prices paid by the consumer, costs of operation should be predetermined on the basis of practical standards within the attainment of workman, machine, department, or plant. Any difference between the actual costs, and the standardized costs, should be carried monthly into a departmental "cost adjustment account," and closed into "profit and loss," at the end of the year.

IV

Profit accounting should be so classified as to reflect the results of the three major sections of a business (buying, making, and selling), that it may be known which contributes to the success or failure of an enterprise and to what extent.

This is perhaps the most important axiom in the entire list, especially with reference to its effect and influence on present-day conduct of industrial affairs.

The usual profit and loss figure as it shows on a monthly or yearly income statement is meaningless, misleading, and dangerous, and is the indirect cause of much of our industrial inefficiency and loss. This is rather a

serious charge, in these days of refinement in industrial and financial accounting, but a charge nevertheless which can be demonstrated as being correct and in line with what many know to be the case. It can be verified by anyone who will take the time to analyze this and the preceding axioms.

A profit or loss figure monthly or yearly is supposed to show what a concern makes or does not make—but that is exactly what it does not do.

What is a business? It is a coordination of buying, making, and selling, but unfortunately the profit and loss figure does not show which of the three factors made the profit or loss, hence we have no way of knowing exactly what the business does do.

Is the profit as usually shown due to manufacturing efficiency, or to shrewd and speculative purchasing, or selling at or above normal capacity, or combination of these things? If a loss, is it due to an absence of these elements?

A concern in good times makes a profit for several years and out of the net earnings builds additions to the plant, declares dividends, and pays taxes on the earnings to state and nation. In later years losses are sustained and the company is then unable to recover the losses from buildings and equipment, stockholders, state, and nation.

The point is—did not this concern pay *too much* out of earnings in good years, which if not spent would later offset the losses in the lean years? Analysis indicates that the answer is *that it does pay too much*, under the usual accounting practice in industry.

If *all* profit was a manufacturing profit and due primarily to manufacturing economy and efficiency, then the above answer would be that it does not pay too much out of earnings in good years for the items mentioned. But is this the case with profit? Absolutely not. Two other factors contribute to and exert a profound influence on profit or loss making—*buying materials and selling finished product.*

V

A significant fact in connection with this question of profit-making is that buying profit or loss and selling profit or loss are a "series of years" proposition and not a yearly proposition like manufacturing profit and loss.

During certain years a concern will make money by buying materials on a low market and selling these materials on a rising market, then in later years it sustains a loss due to having high-priced materials on a falling market. If this profit has been spent, how can it be recovered later on? *Should not such a profit, or part of it, be accumulated against which to apply a later loss?*

During certain years a concern will make money by selling at high prices due to operating the plant at full capacity, or greater than full capacity through overtime, night, and Sunday work; then in later years it sustains a loss due to operating at 40, 50, or even 60 per cent of capacity, when costs are greater than the prices which can be secured for the products. If the profit has been spent, how can it be recovered later on? *Should not such a profit, or part of it, be accumulated against which to apply a later loss?*

As regards manufacturing, however, if a concern can make money in one year, due to efficiency and economy practiced by its operating management, it can do so year after year, *regardless of the effect of high and low material prices and high and low plant capacities,* because productivity of manufacturing is only slightly influenced, if at all, by material prices and capacity factors.

Another flaw in the present methods of profit and loss accounting is that there is no way of telling which division of the three in a business contributes most to making of profit, nor which is responsible when there is a loss.

It is safe to say, and the statement is made on personal observation, that hundreds of concerns in the country would wake up to find out *that they had a low manufacturing efficiency*, if the contribution on the part of the buying and selling branches could be visualized *separately* from the manufacturing branch. There is no doubt at all in the author's mind that many concerns which compliment themselves on their success as manufacturers *are in reality successful buyers or salesmen.*

VI

How can a firm know the real productivity of its sales, production and purchasing managers in the absence of any real basis for gauging their success in making profits for their company? How can the firm call any one of the three to account for losses in the absence of facts as to who is really responsible for these losses?

How can a company determine how much should be paid out in dividends, put into plant and equipment, spent for expansion of the business, and set up as reserves, when it does not know just how much of the profit is the legitimate yearly manufacturing profit, and how much is the volume profit and purchasing profit, some of which, if not all of it, will later be offset by losses?

At any rate there is no getting around the conviction that the usual method of profit accounting covers up such inefficiency as would otherwise be discovered, and is equally as fallacious as using an average overhead for all departments, or an average cost for all units or pounds produced.

The time is coming in industry when purchasing profits and losses and volume profits and losses will be carried forward from year to year, on the argument that business does not arbitrarily stop at one moment in the year, and take on a new form in the next moment. Business is no longer a day-to-day affair, or a month-to-month matter. It will get away from the year-to-year aspect also, so that a period of years, cycles, effect of good and bad years can be plainly visualized.

Profits due to volume and to purchasing made in one year should be shown in such a way as to constitute a fund to offset losses in another year. Further, by working on this basis, profits will be more carefully studied and dividends will then be paid and buildings and equipments added to from operating profits and not from the more or less accidental profits due to purchasing and volume.

The reason we pay profits taxes in one year when there are profits, and get no rebates in the next when there are losses, which is proving harmful in industry, is because there is now no way to visualize and calculate profits and losses for a period of years, and this must be the next forward step in industrial accounting, sanctioned by our government.

The method to pursue in handling profits is to set up reserves for volume and for purchasing and to treat them the same as most concerns treat the Reserve for Bad Debts. This is the recommendation of the Fabricated Production Department of the United States Chamber of Commerce and is an excellent one.

Where does this reasoning lead to? To the conclusion *that American industry has spent many millions of dollars in overexpansion of plant and equipment, in dividends and in taxes, that it should not have spent, because of*

which it has sustained serious losses which it would not otherwise have suffered.

What does the situation call for? First it calls for a clear-cut separation of the profits or losses due to purchasing and the profits or losses due to volume from the total profits or losses, which would leave a figure representing the *operating profits or losses* which after all are the real profits or losses, particularly from the standpoint of the year in question; the factor which can stand on its own feet from month to month, and year to year, undisturbed by volume and material price fluctuations.

To do this there should be set up on the books of the company a Purchasing Profit and Loss account, Volume or Capacity Profit and Loss account, and an Operating Profit and Loss account.

To the Purchasing Profit and Loss account would go the differences between *cost* value of material at time of *receipt*, and *market* value of the material at the time of *use*. To the Volume Profit and Loss account would go the differences between the standard overhead at normal capacity and the actual overhead. To the Operating Profit and Loss account would go the regular operating or manufacturing profits or losses representing the difference between the sales income and cost of sales.

In carrying out this provision with respect to articles of a staple nature, such as pig iron, scrap iron, coal, coke, rubber, lumber, steel mill products, and the like, the plan would be as per this illustration. If the average cost of pig iron as purchased is $35 per ton, and the market drops to $30 per ton at the time of use, the cost records would be charged at the rate of $30 per ton on the tonnage used, the Purchasing Profit and Loss account being credited with the same figure. At the same time a second entry would credit the inventory account at the actual cost of $35 per ton on the tonnage used with a corresponding charge to the Purchasing Profit and Loss account. This would clear the actual cost from the inventory and would concentrate in the Purchasing Profit and Loss the loss on the material used, enabling the cost to be figured on the basis of the normal condition which existed at the time the material was used.

In carrying out the above provision, covering the volume factor the Burden account would be charged with the actual expenditure, the Work-In-Process would be charged with the standard overhead while the difference would be carried to the Volume Profit and Loss account. Space does not permit the full presentation of the book entries necessary to carry out the above recommendations. These would be open accounts during the year, the balances rising and falling as profits or losses were made. At the end of the year balances would be carried to Profit and Loss, thence to Surplus.

This would mean that during the year there would be a visualization of what the profits and losses really were, where they came from and the relative contribution of the three major divisions of the business.

To the banker such information would be of untold value as he could see "behind the scenes" in the best possible way, for he would be able to tell whether buying, making, or selling was responsible for gains or losses.

VII

To summarize, the twelve axioms of industrial efficiency are as follows:

1. Consideration of all factors in costing and pricing is the only protection against unintelligent competition.

2. The best insurance against loss in producing and marketing goods is to work to predetermined standards.

3. That concern is best protected against the uncertainties of commercial competition, which is most closely in touch with its own current facts and happenings.

4. No division of a business should be served at the expense or to the exclusion of other important divisions.

5. Averages should be used with caution and with the fullest realization that some items are above and some below.

6. Productivity in the last analysis is the real gauge of economy in manufacture.

7. That concern which is best posted as to idleness, inefficiency, and rejections is in the best position to eliminate these industrial wastes.

8. Profit on goods should not be based on total costs but only on labors and overhead costs.

9. The greatest volume of business goes to that firm whose prices reflect normal operating conditions.

10. Manufacturing economy and efficiency, not speculation, form the real basis for price- and profit-making.

11. What a product should cost in direct labor is the real direct cost, and not what the usual figuring says it cost, as any difference is waste, and waste should not be reflected as part of direct cost.

12. Profit accounting should be so classified as to reflect the results of the three major sections of a business (buying, making, and selling), that it may be known which contributes to the success or failure of an enterprise and to what extent.

A study of these laws, which have been stated as axioms, and an acceptance of them by accountant, engineer, banker, executive, and administrator, will do much to constructively aid industry in these times and in the years to come, as it will help to put costing and accounting practice on a sound basis that will assist materially in effecting reductions in costs, in determining scientific prices. Also it will enable heads of concerns to most intelligently and efficiently operate the complex machinery of modern business.

A MESSAGE TO THE MAILING DEPARTMENT

By H. A. BLACKMAN *

I—FIRST-CLASS MAIL

THE Indians used to have an amusement called "running the gauntlet." As the victim passed down the line, each waiting Indian swung his club and struck the runner if he could, and he generally could.

Every piece of mail that starts out on its journey must run just such a gauntlet of possible disasters. A long line of dangers waits for it on either side, and any one of them may destroy its usefulness in whole or in part. But these are worse than the dangers of the gauntlet because they strike in the dark and from behind. The public sees the results, but it does not know what produced those results. The present message from one who has been in the postal service for over 20 years is written to explain these dangers of the post so that as far as possible they may be avoided.

The catastrophes that meet the mail after it leaves the office of the sender are a serious matter. Every day they cost the business world a heavy toll not only of annoyance and worry, but of good, hard money. And the resulting loss is a dead loss because, as in the case of fire, no one is benefited. The yearly total of this loss is over $100,000,000. Add to this the worry, the uncertainty, and the heartache of broken plans and ruined hopes, and the importance of the subject is obvious.

II

Let us take an example. A Philadelphia manufacturer wrote a letter to a Washington legal firm giving certain directions in regard to a patent. A week later, the letter had not reached the Washington firm and the matter had developed into a costly legal tangle. Finally, the letter came, marked "Opened by mistake by White and Company, San Francisco, California."

The Philadelphia firm lost by that delay the sum of $10,000. Why should they not complain of such service? They did that very thing and investigation was made. White and Company reported that the Washington letter was gummed to a letter sent them by the Philadelphia firm. These two letters were so tightly, so neatly stuck together that the office boy did not notice there were two until he had clipped open the ends of both envelopes.

That told the whole story. The Philadelphia office boy had used too much water in stamping and sealing his letters. While they were still damp he had laid them nicely together and when they reached the post-office many of them were stuck together. Among these was the Washington letter, stuck directly beneath the San Francisco one.

These "stickers" are extremely difficult for postal workers to detect. Hundreds of them are caught and pulled apart but, in spite of all vigilance, other hundreds hide with such cunning that they escape notice. The clerk who handled those two letters never knew that he handled more than one, and saw no address but San Francisco. Both letters went to the far

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west and were rehandled there two or three times without detection.

Every day, thousands of business firms are allowing their office boys to missend mail in this way. Scarcely a mail is received at any first-class office which does not contain from one to five of these troublesome "stickers" which have escaped the eyes of some dispatcher. A sloppy, careless office boy will always tell his employer that stickers cannot be avoided, but they can and should be avoided. If the office boy is not permitted to lay his letters together while they are damp, he will be more economical of water and there will be no more "stickers."

III

The perils of posting are very simply told. First, it is remarkable how many business concerns trust this work to cheap and irresponsible help. Time after time, the boy whose duty it is to take the mail to the post-office in the evening will go home on his way to the post-office and get his supper before the letters are mailed. In other cases, he will drop the whole bunch of letters into a collection box in order to save himself the trip to the post-office. Business mail is, or should be, too important for such treatment. If indifferent help must be used, the manager should make very sure, no matter what else is slighted, that the letters and other mail matter are properly posted.

This also applies to the matter of "high power" letters or mail for registry or special delivery. Bills and statements may be of minor importance in the business man's mail, but specifications sent in hopes of securing a contract and other similarly important matters, particularly such matters as legal notices or the cancellation of an order are "high power" letters—a great deal of money may swing upon their safe delivery. All such important letters should be kept separate from the ordinary mail and be presented at the post-office at the proper place. Registry mail must be presented with a special application and a receipt obtained—if you fail to do this it means trouble. Special delivery letters should never be put with the ordinary mail or dropped into the ordinary drop box. Ascertain at your own post-office the mailing requirements for the three kinds of letters—registered, special delivery, and ordinary—and then see that the mailing clerk or office boy, or whoever looks after such matters complies with these requirements.

In many cases, a firm will allow an office boy to dump all kinds of mail into a sack—letters, circulars, catalogues, packages—take them to the office and dump the whole lot into one pile there. Such a procedure almost always makes trouble. Time after time, important letters have slipped into catalogue envelopes and have gone with those catalogues to the wrong destination. Unsealed circulars also present a fine chance for letters to slip into them and hide. But that is not all. In a rush time postal workers always let third-class stuff lie unnoticed. A pile of mixed mail containing much third-class mail might be mistaken for a bunch of "circs" and there it would lie until all other mail was taken care of. It is easily seen what serious delay this might entail on the unnoticed first-class mail.

Experience has proved that indifferent help in connection with the mail is tremendously expensive. Any concern using such help is committing a business misdemeanor if such employees are not watched and their work inspected in detail until they prove that they are to be trusted.

Watch, inspect, follow up your mail—do not leave such things to luck!

The dangers of the canceling machine are not often understood. Thousands of concerns put into letters such things as coins, jewelry, metal stuff, dental goods, and optical supplies. Then they write on the envelope "Not for Canceling Machine" or some other such notice, and expect that warning to keep the letter out of the canceling machine. Really, such notices do no good at all because the clerk who faces letters for the machine never reads anything on them. He sees nothing but the stamp. One flip and the letter is faced and that swift move makes reading quite impossible.

The best way to protect a "lump letter" is to put the stamp in the middle of the back of the letter and make the lump very big. By the time the clerk locates the stamp, he will notice the lump. The adoption of this simple method would utterly do away with the damage to "lump letters" and the saving to dental and jewelry firms alone would amount to many thousands of dollars annually.

Another canceling machine danger is the "fluffy" letter. Many times, a firm's office force will carelessly fold letters so that they will make the envelope "fluff." When a swiftly working facer overlooks such a letter and faces it for the canceling machine, a disaster is certain. The little separator wheel of the machine operates in reverse to the feed wheel and, when these two wheels get to working on a "fluffy" they rip it open, slam it into the printing head in a lump and it emerges from the machine a complete ruin. This is especially true of window envelope "fluffies" because the tissue paper window is too weak to stand the strain. Never let a "fluffy" be made if it can be avoided, and never let such a letter be faced in with your mail for the canceling machine.

Since rural delivery has become so popular, thousands of little post-offices have died out. The little town is still there but its people all get their mail from some other town by rural delivery. Yet these people often give the name of their little dead town as their post-office address.

And what a problem that brings to the business concern. John Brown of Darrtown, Ohio, sends to Chicago for a nice bill of goods. The concern acknowledges his order and his money on a postal card and the card is returned from the post-office marked "No such Post-office in State Named." Is that not a troublesome tangle? How will they communicate with John Brown?

Thousands of firms would not know what to do. Perhaps they would say "Brown has made this fool blunder—let him suffer." But they could save Brown's good-will and his future business in a very simple way. At every book store in the land, a list of the towns in any state can be bought for a song. These lists show every little post-office and every little town without a post-office in the state. In the list for Ohio, the town of Darrtown is marked "Mail from Seven Mile." That solves the problem of Brown's blunder and saves his trade. Any town of any state can be run down in the same way, and the books are so cheap that it pays to buy a new one each year to keep up with the changes.

But what shall be said of the salesmen who take orders and send in these "dead" post-offices as addresses for their customers? It makes trouble all around and salesmen should be warned against such blunders. Time after time, that mistake occurs with annoyance and loss to the customers and the loss of their good-will to the house from which they wish to buy.

IV

The entire business world knows the perfect form of address and its use has become an institution. Any variation from this is dangerous. The correct form is so firmly fixed that postal workers expect it on all mail and any variation is likely to trick them into some error. Do not take a chance. Keep the form of address perfect and you will be rewarded in the accuracy with which your mail will be handled.

Keep the county out of your address. It only confuses a clerk when he is working rapidly and frequently causes him to make an error. The county does not help him any—he has to know exactly where every post-office is located in the states that he works. If you address your letter to "Adams, Ind.," the clerk who handles it will know that Adams is "Chi and Cin" southeast of Indianapolis in Decatur County. But if you address your letter to "Adams, Decatur Co., Ind.," the chances are that the clerk will be deceived and will send it to Decatur, Indiana, which is away northeast in Adams County. The county in an address is not only useless but is a deceiver and a missender of mail.

Abbreviation of addresses is another frequent cause of error. Many old clerks who have worked Illinois mail for years would know that "K. K. K., Ill.," meant Kankakee, Ill., but there is always a good chance for such a letter to go wrong. If you address a Cleveland letter to Cleve, O., there is a good chance for it to go to Cleves, Ohio, which is down near Cincinnati. An address to "Logan, Ind., will go to that town in the southeastern part of the state, not to Logansport, Ind. There are hundreds of such abbreviations used and they are sending mail astray every day. Business managers cannot be too careful to guard against them. If they would be really safe they would never allow the name of a state to be abbreviated. Such a rule would be trouble saving and in the long run economical.

Another address danger is that of omitting the province from Canadian addresses. One would hardly address a letter to Springfield, U. S. A. No more should he address a letter to St. Johns, Canada. The province is almost the only key that most United States dispatchers have to help them start Canadian mail right. It should never be omitted.

Almost always business men use an envelope with a printed return address on it and most of them have learned the value of that return address. But it sometimes happens that a concern will "take a chance" and send out letters without it. When this is done, trouble of some kind is sure to result. Let me give an example:

One of the candidates for a county office employed a public stenographer to send out electioneering letters to the voters of the county. The stenographer mailed the letters in a corner collection box each evening. There was no return address on the envelopes and no one at the post-office had any way of finding out who sent out the letters.

Each letter as it happened was a trifle overweight and every one of them had to be delivered "due 2 cents." The resentment that bunch of postage due letters created against that candidate can be imagined. All of it could have been saved if the sender had used a return address envelope so that he could have been notified of the short postage.

V

Envelopes are a very real and ever-present source of trouble to the postal service and to the business man as

well. Every day attorneys report torn and ruined legal papers, authors report damaged and twisted manuscripts, and business men report torn, lost, and ruined order sheets. All this might be saved if they would take one piece of advice: "Use standard size envelopes."

That is the whole secret of stopping most of this damage. Standard size envelopes are always tied up in good strong bundles before they are started on their travels. These bundles can resist almost any kind of wear and tear without damage. But the odd-size letter must go it alone because there are no others like it to make up into a bundle. It is thrown into the pouch without protection of any kind and 30 or 40 bundles of letters twist and bend and crush it at every move of the pouch. No wonder it arrives, as the doctors say, "a dissolution of continuity."

Many business firms make their order letters of odd size in order that they may be readily picked out of the rest of the mail. Such practice is bad, because as stated these odd-size envelopes get torn and damaged in transit. A far better practice would be to make order envelopes of some striking color as blue, green, or red. A standard-size envelope could then be used and the distinctive effect be secured without danger of damage to the envelope in the mails.

VI

Another serious cause of loss and trouble in the mails is found in the window envelope. These envelopes appeal to business men because they offer two very positive advantages. They save envelope addressing, the address on the head of the letter showing through the tissue paper window, and they absolutely eliminate that old error of getting one man's letter into another man's envelope.

But the business world pays a heavy price for these advantages. Postal workers everywhere dislike the window envelopes mainly because the dimness of the address, seen through the tissue paper window, delays their work, hurts their eyes, and makes trouble in other ways. The Post-office Department also dislikes the window envelope because the dimness of the address slows down the speed of postal workers and thus costs the Department more money. The result is that the whole postal service is against the window envelope. Whenever there is a rush, they are apt to get last service because they are slow and tedious to work. Besides, the canceling machine takes a particular delight in chewing up this kind of envelope on account of the friction of the separator wheel upon the tissue paper window.

Beyond all this, the window envelope is not safe. It is an easy matter for a dishonest person to tamper with the window, remove what he wants, and reseal the window so that the rifling will not be noticed. Also in forwarding it is impossible to scratch out the old address and, quite often, such forwarded letters after being started on their way twice, turn in their course and come right back to the first address, thus making double delay.

But the worst of the window envelope is yet to come. That dim address, read through the tissue paper window tricks the eyes of postal workers in the most outrageous manner. When you stop and look closely at a window envelope letter, the address appears perfectly plain and error in reading it seems unreasonable and inexcusable. Take the place of the postal clerk and handle them at the rate of 50 per minute and the address

will take on an entirely different look. State abbreviations especially become jumbled and deceptive. "Ia.," looks too much like "La.," "Col.," too much like "Cal.," "Me.," too much like "Mo." Window envelopes carry only about 10 per cent of our letter mail, but at least 25 per cent of the errors of misreading addresses are made with them. They trip the postal clerk and make him "spill the beans" —and they are your beans.

Yet the window envelope would not be so bad if its users would conform to the postal regulations. These regulations require:

1. Good clear window
2. Nothing but address showing through window.
3. No lead pencil or carbon address—must be ink or typewriting
4. Enclosure white or nearly so
5. Address black or nearly so
6. Enclosures must fit envelopes snugly

If these requirements are religiously observed, many of the objections to window envelopes are removed, but it is still advisable to keep important letters out of them. They will do for bills, statements, etc., but, for all important mail, a regular standard envelope should be used.

VII

Errors in stamping mail cost more in annoyance than in money, but they cannot be safely ignored. The commonest of these is "failure to stamp." When a concern's return address is on such a letter, the delay is very slight because it can be returned immediately for postage. If, however, there is no return address, the delay is serious because the letter must lie dead in the office until a notification clerk can write to the person addressed and get him to send postage.

The best remedy for failure to stamp is to give all letters a rapid inspection after they are sealed and stamped. This process also catches "stickers," bad sealing, and half a dozen other things that may be wrong. If this inspection is made, postal employees will often accept stamp deposits to cover any accidental "failure to stamp" but the Department frowns upon such a deposit otherwise, because it tends to produce carelessness in the business office. If there is a stamp deposit at the post-office, a happy-go-lucky office boy is all too prone to be careless. "They get 'em at the post-office anyway," he thinks. But, when there are but few failures to stamp, and an inspection is made, it keeps the boy up to the mark and the postal clerk is much more willing to accept a stamp deposit to cover the rare cases when stamps are overlooked.

Another mistake often made is the wrong placing of stamps. The stamp belongs in the upper right-hand corner of the envelope and, ordinarily, *nowhere else.* If it is misplaced, the canceling machine cannot reach it and it must be canceled with an unsightly hand stamp. Any business firm receiving such a letter is sure to get a bad impression. "Sloppy office work," "poor supervision," "no system," are some of the unspoken, subconscious impressions which such letters produce. An experience of 20 years has proved the truth of this.

Another frequent source of trouble arises from the effort to get special delivery service with ordinary stamps. Every day, business firms mail such letters without writing "Special Delivery" upon the envelope. If the Department allowed the postal clerk to guess at what service was wanted, special delivery or registry, in 9 cases out of 10, the clerk would guess wrong. No special delivery letter with 10 cents

extra postage in ordinary stamps should be mailed without the endorsement "Special Delivery" upon it.

And do not forget that first-class domestic postage is always an even number of cents, never odd. A letter that weighs over 4 ounces—even if it is ever so little—must pay for five ounces, or 10 cents postage. If it weighs over 8 ounces, it must pay for 9, or 18 cents. There is only one place in the country where a one-cent rate can be obtained on first-class letters, and that is at the little town with no delivery service. Such letters must be mailed at the post-office for a person who calls at that post-office for them. If they receive any transportation service whatever, they must pay the full two-cent rate. It can be readily seen that such cases are so negligible that a one-cent rate on any first-class mail can safely be forgotten.

It is also well to remember that, if you seal up mail matter it automatically becomes first-class mail and must pay the first-class rate. Time after time, business concerns blunder in this matter, and it always costs them good, hard money. There is only one case—a proprietary package—where this rule does not apply, and that will be explained in a later article. In all other cases of sealed envelopes or packages, letter postage must be paid.

Occasionally, as where some parcel post package or mailing case is indavertantly sealed or locked, the cost may be heavy. The postmaster, however, has no discretion—if the package is sealed and he notices that it is sealed, he must collect letter postage or refuse to transport the package.

(*To be Continued*)

FEDERAL TAXATION OF STATE AND MUNICIPAL BONDS

BY CLARENCE HEER *

THERE was recently introduced in congress a bill which proposed to amend the constitution of the United States so as to permit the taxation under the federal income tax of state and municipal bonds. This bill, introduced by Representative Green of Iowa, was referred to the Committee on Ways and Means where it has since rested.

Whether the Green Bill will ever become enacted into law, or whether it will die an ignominious and painless death in committee, is at the present writing a matter for conjecture. The proposed amendment has been ushered in without publicity, and there seems to be no organized sentiment pushing it from behind. Apparently business men are either ignorant of the bill, or they are of the opinion that they have nothing to gain by its passage.

The present silence and indifference on the part of business men seems hard to reconcile with what has been their attitude during the past. Ever since the burden of national and local taxes began to press heavily upon the country, there have been periodic outcries against the tax-exempt bond. Among the associations of business men and economists who have put themselves on record as strongly condemning this form of tax exemption may be mentioned The United States Chamber of Commerce, The American Bankers' Association, The Investment Bankers' Association, The National Tax Association, and the New York State Tax Association.

Tax-exempt bonds consist almost entirely of the capital obligations of the federal and state and local governments. There are outstanding at the present time some $9,000,000,000 of totally tax-free and $14,000,000,000 of partially tax-free securities. The totally tax-free securities are exempt not only from all state and local taxation, but from the federal income tax as well. The partially tax-free securities, which consist wholly of liberty bonds, are exempt from all state and local taxes but enjoy only a limited exemption under the federal income tax. Of the totally tax-free securities, about $6,500,000,000 relate to the issues of state, county, and municipal governments.

It is impossible to estimate the exact amount of revenue which is lost to the various governmental units as a result of the exemption of these securities from taxation. If, however, the income from the $9,000,000,000 of totally tax-free bonds was subject only to the normal federal income tax of 8 per cent, a revenue of $29,000,000 per annum would be raised. Assuming that the bonds are held by individuals whose incomes average around $50,000 per annum, the imposition of the surtaxes would yield an additional revenue of $33,000,000 per annum. Tax-exempt bonds, therefore, cause a loss to the federal government alone of over $60,000,000 a year.

II

On various occasions in the past, attempts have been made to subject

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the bonds of states, counties, and municipalities to the federal income tax. Each time the same insuperable obstacle has presented itself. Eminent lawyers have declared that congress could not tax these securities unless the states agreed to such taxation to the extent of approving an amendment to the constitution which would permit it. Among the prominent lawyers said to hold this view are Charles E. Hughes, Elihu Root, and ex-Attorney General Wickersham.

The Green Bill proposes to remove all doubt as to the power of congress to tax the securities of states and their subordinate political units by enacting the required constitutional amendment. It applies only to future issues of securities, and provides that the federal government shall have power to collect taxes on the income derived from the securities of any state or subdivision thereof, provided such taxes are made to apply also to its own new issues. Reciprocally the state governments are empowered to collect taxes on income derived by their residents from all future issues of federal securities, provided only that they tax the income from their own securities in the same way.

It is seen that the Green Bill does not eliminate tax-free bonds. It does, however, put an effectual stop to their further growth, and in view of the serious business menace which these bonds represent it is important that business men should become thoroughly awakened to the advantages and the desirability of the proposed legislation.

Before launching into details as to the evils inherent in tax-free bonds, it is only fair to state the case in their favor. The economic argument for the exemption from taxation of governmental obligations may be stated as follows:

By exempting their securities from taxation, governments are enabled to borrow at more favorable rates than would otherwise be possible. The psychological effect of the exemption privilege, it is alleged, is to increase the market value of the bond by an amount greater than the monetary value of the taxes sacrificed, so that governments save in interest costs more than they lose in diminished revenues.

This argument, if it is valid, may serve to explain why a government should exempt its own securities from taxation. It does not explain, however, why any government should exempt the securities of another government. In other words the economic argument in favor of exemption, if it is valid, may furnish a reason why the federal government should refrain from taxing its own obligations, and why states and local governments should refrain from taxing their respective issues. It cannot, however, be used to justify the exemption of state and municipal securities from the federal income tax, nor the exemption of federal securities from state and local taxation.

The justification of the latter species of exemption rests on constitutional grounds. Very early in the history of our country it was decided that the power to tax involved the power to destroy, and that, therefore, the several states had no power to tax the obligations of the federal government, nor had the federal government the power to tax the obligations or instrumentalities of the states.

The Green Bill recognizes the validity of this constitutional obstacle and proposes to overcome it by enacting the necessary amendment. The sole argument in favor of tax-free bonds, therefore, remains the economic one.

III

Having stated the argument in defense of tax-free bonds, it is now proposed to draw up the case against them. From an economic standpoint tax-exempt bonds may be indicted on no less than four separate counts. They result in a considerable net loss of revenue to the government. They violate the canon of taxation according to ability, and make a farce of the principle of progression. They encourage extravagant and ill-advised expenditure on the part of state and local governments. The fourth and most important count in the indictment is that they increase the difficulties of corporate financing, and force private enterprises to pay higher rates for capital than would otherwise be necessary. This situation is resulting in an uneconomic distribution of capital, which may seriously curtail the productive capacity of the country.

Before presenting the evidence in support of these various charges, it might be well to secure an idea of the amounts and classes of tax-free securities outstanding. It has already been stated that there are approximately $9,000,000,000 of totally exempt and $14,000,000,000 of partially exempt securities. A detailed statement of the various issues included in this statement is shown below:

Wholly Tax-Free Securities:

Obligations of states and minor civil divisions	$6,500,000,000
Securities issued under provisions of federal farm loan act	267,485,000
Obligations of the United States issued prior to Sept. 1917	872,000,000
First Liberty loan 3½'s	1,410,075,000
Total	$9,049,560,000

Partially Tax-Exempt Securities:

First Liberty loan converted 4's	$15,979,100
First Liberty loan converted 4¼'s	522,652,950
Second Liberty loan 4's	70,279,500
Second Liberty loan converted 4¼'s	3,244,379,000
First Liberty loan second converted 4¼'s	3,942,150
Third Liberty loan 4¼'s	3,609,798,300
Fourth Liberty loan 4¼'s	6,352,386,850
Total	$13,819,417,850

The figure of $6,500,000,000, given as the amount of state, county, and municipal securities outstanding, is an estimate and requires explanation. On June 30, 1913 there were approximately $4,000,000,000 of these bonds outstanding. The corresponding figures for 1922 are not available, but it is known that since 1913 new long-term obligations to the amount of over $5,000,000,000 have been issued by the states and their political subdivisions. In order to be on the conservative side it has been assumed that only about half of this sum represents a net addition to indebtedness, and that the remainder represents the refunding or replacement of obligations included in the 1913 figure. If this assumption is correct, it follows that the amount of state, county, and municipal bonds outstanding at the present time must be somewhere in the neighborhood of $6,500,000,000.

The securities listed in the above schedules comprise only the long-term obligations of governments, and do not include their short-term obligations, all of which are wholly tax-exempt. Were short-term obligations included, the addition of United States certificates of indebtedness, Victory loan notes and other short-term issues of the federal and state governments

would increase the amount of totally tax-free securities from $9,000,000,000 to approximately $16,000,000,000.

The first evil to be charged to the account of tax-free bonds is that they result in a net loss of revenue to the government. In this connection we need concern ourselves solely with the loss which is sustained under the federal income tax. Theoretically, states and their minor civil divisions tax stocks and bonds under the general property tax. As a matter of actual practice, however, intangible personalty of this kind largely escapes assessment, so that even were governmental issues subject to state and local taxation, the increase in revenues would probably be slight.

Were the income from the $9,000,000,000 of totally tax-free bonds subject to the normal federal income tax of 8 per cent, a revenue of $29,000,000 would be raised. This figure, however, as already stated, is not a real measure of what the government loses through the existence of tax-exempt securities. These securities are naturally most valuable to individuals of large income, who are subject to the income surtax. It is probable, therefore, that the major portion of tax-free bonds has drifted into the hands of investors in the higher income brackets. Assuming that the average income of these investors is $50,000 per year, the government's inability to collect the surtaxes increases its loss to approximately $62,000,000 per annum.

IV

If the economic argument in favor of tax exemption has any validity, the government should more than makeup for this loss of revenue in lowered interest costs on its funded debt. It so happens, however, that over two-thirds of the total amount of tax-exempt securities consist of the obligations, not of the federal government, but of states and their minor civil divisions. The federal government surrenders approximately $45,000,000 of income taxes with respect to these securities, in return for which it receives no compensation whatever. In effect, the federal government is subsidizing the bond issues of state and local governments, and the evil effects of this subsidy, in encouraging extravagance and diverting capital from productive to unproductive channels, will be considered further on.

Farm loan bonds comprise some $267,000,000 of totally tax-free issues. Here again the federal government derives no compensatory advantage from tax exemption and is in effect granting a subsidy to agricultural borrowers.

After subtracting state and local and farm loan bonds from the total of tax-free securities, only $2,282,075,500 of federal issues remain. If the government makes any net saving through lowered interest costs, it must be in respect to these issues. We can, however, rule out at the start the obligations of the United States issued prior to September 1917. Practically all of these securities were issued prior to the advent of the income tax, and the remainder at a time when the rate of tax was exceedingly low. Investors could not foresee the war and the resulting high rates of taxation. It is doubtful, therefore, whether at the time much value was attached to the tax exemption privilege, or that it influenced the issue price of the bonds to any appreciable extent.

There remain the $1,410,000,000 of first Liberty loan 3½ per cent bonds. Did the government make any net saving by totally exempting these bonds from federal taxation? Apparently not, since the government did

not continue this policy and future Liberty loan issues were given only a limited exemption privilege.

The truth is that, even from a theoretical point of view, the argument that tax exemption saves in interest costs as much or more than is lost in taxes, is fundamentally unsound. It is conceivable that, were it possible to accurately predict the future trend of taxes for the entire life of a bond, tax exemption might increase the market price of the bond an amount equal to the discounted value of the taxes sacrificed. But it is not possible to accurately predict the future trend of taxes, and, in view of this uncertainty, investors will not discount the exemption privilege at its full value.

Where progressive taxation exists, there can be no doubt whatever that exemption results in a net loss to the government. In order to float bond issues as vast in amount as were the various Liberty loans, it is necessary to have a wide market, which must perforce include purchasers in the lowest income brackets. The bonds, however, must be sold at a uniform price to all regardless of the income of the purchasers. If, then, the price of the bonds is to be enhanced at all by virtue of tax exemption, the extent of this enhancement can be no greater in value than the tax saving to individuals in the lowest group whose purchasing power it is necessary to utilize in order to absorb all of the bonds. If the purchasers in this group pay no tax at all, the market price of the bonds will not be advanced a single farthing by virtue of tax exemption, although the government will forever lose the right to collect taxes and surtaxes on that portion of the issue, which is originally, or at any time thereafter, purchased by investors in the higher income groups. If purchasers in the lowest income group are subject to, say, the normal income tax, exemption may possibly raise the market price of the bonds by an amount equal to the capitalized value of the taxes saved. This increase in price, although sufficient to reimburse the government for surrendering its right to collect the normal tax, will not reimburse it for surrendering its right to collect the surtaxes. The net loss in revenue is seen to be considerable, when it is recollected that ultimately if not immediately the bulk of the tax exempt issues will drift into the hands of investors in the higher income brackets.

V

Having effectually disposed of the fallacy that under the existing system of taxes the federal government has anything to gain through the exemption of its own or state and municipal securities, we are now free to consider the second evil ascribable to tax-exempt bonds. This is that they violate all accepted canons of equitable taxation. It is generally recognized that taxes should be proportioned according to ability to pay, and that the fairest criterion of ability is income. Income, however, is not an exact measure of ability. It is recognized that, as a man's income increases, his ability to support the government increases, not proportionately, but at a somewhat accelerated rate. It is also generally recognized that, as between incomes received without effort on the part of their recipients and incomes received as a result of active participation in productive enterprises, the burden of taxation should rest less heavily upon the latter. Thus, two features have been added to almost all modern income tax laws, to wit, progression as to rate of tax and differentiation as to source of income.

The existence of vast quantities of tax-free bonds defeats the underlying purpose of both progression and differentiation. The larger an individual's income, and the higher the surtaxes to which he is subject, the greater becomes the inducement for him to escape taxation altogether by investing his wealth in tax-free bonds. Moreover, it is the unproductive recipient of the effortless income who is in the best position to liquidate his investments in order to reinvest in tax-free government securities. The man of wealth, actively engaged in the prosecution and direction of business enterprises, ordinarily has the major portion of his capital tied up in these enterprises, and cannot withdraw it without at the same time relinquishing his control. The individual actively engaged in increasing the wealth of the country is thus made to bear the brunt of taxation, while the government bond holder, who because of his unproductivity should be subject to especially heavy taxes, is not taxed at all.

The third count in the indictment of tax-exempt bonds is that they constitute a direct encouragement to the increase of state and municipal indebtedness. As has already been mentioned, the federal government, by exempting the obligations of state and local governments from the income tax, is, in effect, paying an annual subsidy of some $45,000,000. Moreover, this subsidy is being increased with every new issue of tax-free bonds. That it has had a very stimulating effect in increasing the issue of bonds by states and their subordinate political units, cannot be doubted in view of the tremendous increase in indebtedness which has taken place in recent years. The following statement shows the total par value of state, county, and municipal bond issues for each year from 1916 to 1921 inclusive.

New Bond Issues of States and Minor Civil Divisions

1916	$497,400,000
1917	444,936,000
1918	262,824,000
1919	770,196,000
1920	773,664,000
1921	1,420,616,000

The above statement reveals the astounding fact that for the year 1921 new bond issues were nearly three times as great as they were in 1916, while for 1919 and 1920 they showed an increase of over 50 per cent over 1916. This tremendous increase in indebtedness is difficult to explain merely on the basis of the legitimate capital requirements of states and municipalities, especially in view of the rather extensive undermaintenance with respect to all kinds of public works, which has been so conspicuously apparent in recent years. The suspicion is raised that a considerable portion of this increase represents waste and extravagance, induced by a knowledge of the easy marketability of state and municipal bonds. This suspicion is confirmed by official statements such as the following which appears in the 1920 report of the Wisconsin Tax Commission:

> In this connection it may not be amiss to call attention to a tendency to create public debt and to issue bonds to meet liabilities that in many instances sound public policy demands shall be met by current taxation. . . . The total amount of interest paid by all the cities of the state in 1916 was $1,232,311. In three years this had increased so that in 1919 the cities paid $1,681,406 interest, an increase of interest paid of 28 per cent in three years. . . . It is believed that this tendency is more pronounced in cities than in counties and rural communities but it is not absent in the latter.

Wisconsin may well take warning from Ohio in this respect. The auditor of that state in his 1917 report calls attention to

the amazing fact that while the 80 cities of that state containing a population of over 5000 each collected in taxes $26,411,178 for city purposes alone, it required $180,657 in excess of that vast revenue to meet the interest payments and to retire bonds falling due and that there was not one cent left for regular running expenses. As a whole Ohio cities paid the salaries of every public official, constructed all improvements, and met every dollar of running expenses not from taxation but by means of new bond issues.

The auditor of Cuyahoga County, in which county Cleveland is situated, in a letter dated October 1920, says about Ohio cities:

It is safe to say that the tax rates in our larger cities will run from $2 to $2.40 for the 1920 taxable year. . . . Our cities are running into debt, piling up deficits which are then funded into bonds which in turn aggravate the financial crisis of the cities. The deficit of the City of Cleveland was $5,750,000 which was funded into bonds. The year before it was $4,500,000 and the year before $2,500,000. In other words, irrespective of tax rates and tax receipts the municipalities seem to be spending money, running up debts, and then securing legislative sanction for funding these deficits.

The debts which states and municipalities are now so lightly piling up will ultimately have to be paid out of taxes, which will further increase the burden on business. This evil, however, is more or less remote. Meanwhile the continued issuance of tax-free securities is resulting in a present evil, which, in its menace to business, is even more serious. This brings us to the last charge in our indictment of tax-free bonds, namely, that they are increasing the difficulties of corporate financing, and forcing business enterprises to pay higher rates for capital than would otherwise be necessary.

To an investor whose income is $50,000 per annum, a 4 per cent tax-free municipal bond is equivalent, as regards net return after the payment of taxes, to a corporate issue yielding 5.7 per cent interest. To an investor whose income is $500,000 per annum, a corporate issue must pay 10.5 per cent interest to yield the same net return as a 4 per cent tax-exempt security. This attractiveness to the large investor gives tax-free bonds an unfair competitive advantage in the investment market, and is resulting in an uneconomic distribution of capital.

VI

Productive private enterprises are unable to secure needed funds for expansion, while governmental agencies are obtaining more than their share of capital at very low rates, and are expending it for purposes which are sometimes both unproductive and wasteful. The full story is strikingly brought out in the statement on page 338, which compares the volume of new state and municipal issues with the new capital issues of corporations for the period from 1913 to 1921, inclusive.

The outstanding fact brought out by the following table is that in 1913 the capital issues of states and subordinate political units amounted to only a quarter of the total of corporate issues, whereas in 1921 they amounted to over a half. In considering the intermediate years, it should be borne in mind that the years 1914 and 1915 were on the whole years of depression, in which industrial expansion was slight. The succeeding period was one of rapid industrial expansion. Since state and local governments did not have to expand their activities as a result of the war, it might be expected that the ratio of state and local to corporate issues would have declined during this period. Instead we find it remaining substantially the same.

Year	New Issues of States and Minor Civil Divisions (Monthly Ave.) (In Thousands)	New Capital Issues of Corporations (Monthly Ave.) (In Thousands)	Ratio of State, etc., Issues to Corporate Issues
1913	$34,049	$137,145	25 Per Cent
1914	37,159	119,710	31 " "
1915	41,049	119,613	34 " "
1916	41,450	182,208	23 " "
1917	37,078	127,498	29 " "
1918	21,902	112,068	20 " "
1919	64,183	251,764	26 " "
1920	64,472	258,886	25 " "
1921	118,385	219,572	54 " "

The disproportionate absorption of state and local, as compared with corporate issues, has shown some let-up during the first five months of 1922, the ratio of governmental to corporate issues being 36 per cent. The situation, however, is still alarming, not only from the standpoint of the corporations who are its victims, but from the viewpoint of the country at large.

In the interest of business recovery, capital should be allowed to flow where it is most needed, and where it will be put to the most productive use. The exemption from taxation of governmental securities constitutes an artificial interference with this free movement of capital. The Green Bill, if its purpose is carried out, will not remove all the evils of the tax-free bond since it applies only to new issues of securities. It will, however, take away the competitive advantage which this form of security now enjoys in the investment market, and thus will again allow capital to flow freely into its accustomed channels. For this reason, if for no other, business men ought to demand the enactment of the Green Bill.

FIRE INSURANCE COMPANY ACCOUNTING—IV

BY WILLIAM B. WIEGAND *

THE annual statement required to be filed with the state supervisory officials by fire insurance companies consists, as to financial conditions, of a statement of income and disbursements followed by a balance sheet. From the previous articles of this series it will be recalled that the income for the year, made up of cash receipts and increases in valuation of assets, is added to the amount of assets shown on the ledger at the close of the previous period, from which total are deducted the cash disbursements and decreases in assets so as to prove with the amount of assets on the ledger at the present closing. These ledger assets are set forth in detail in the balance sheet, and to the sum of them is added or subtracted the result of what might be termed an inventory at the close of the year.

From the total available assets is deducted the amount of liabilities to give the surplus as regards policyholders divided into capital stock and surplus comprising the net worth of the company. This latter surplus does not correspond to any account in the ledger, because on the ledger the premium income accounts have been closed out without deduction for reserves, and also because, on the annual statement, adjustments are made that are not given effect on the ledger. Thus, in the annual statement, the amount of unearned premiums determined in the manner described in a previous article,[1] and reported but unpaid losses have both been set up, which, with the inclusion of other non-ledger liabilities as well as the net result of the revaluation of assets, will, of course, give a statement surplus at great variance with the ledger account.

As there is no profit and loss account, the general ledger will not show the result of a year's operations other than by a comparison of the balances of surplus at the opening and closing of a period with due allowance for dividends. This method which corresponds to that used in the single-entry system of bookkeeping is unsatisfactory since the source of income or the object of expenditures is not shown. Consequently it is necessary to prepare a statement of profit and loss, or as it is termed, the Underwriting and Investment Exhibit. (Figures 1 and 2.)

As the caption of this exhibit indicates, there are two sources of net income or loss, underwriting and investments, one the true and the other the incidental activity of a fire insurance company. The various figures used in the exhibit are obtained from three sources:

1. The income and disbursements statement.
2. The statement of assets and liabilities.
3. The annual report of the previous year.

The last two sources furnish the balances to be added or subtracted, as the case may be, from the gross amounts received or disbursed for the year obtained from the first named source.

To the total writings for the year are added both the net amount of deposit premiums on perpetual risks, which are rather infrequently met,

* Formerly an Examiner for the New York State Insurance Department, Albany, New York.

[1] See August issue of *Administration*.

10 ANNUAL STATEMENT OF THE ______________________ (Write or stamp name of company) Form 2

UNDERWRITING AND INVESTMENT EXHIBIT

Showing the Sources of the Increase and Decrease in Surplus during 1921

UNDERWRITING EXHIBIT				Gain in Surplus	Loss in Surplus
Premiums					
1. Total Premiums per items 17 and 18, page 2, $______ less $______ per item 30, page 3	$				
2. Add Unearned Premiums Dec. 31, 1920, per item 4 of last year's Exhibit					
3. Total					
4. Deduct Unearned Premiums Dec. 31, 1921, per item 19 and $______ reclaimable on perpetual insurance, per item 20, page 5					
5. PREMIUMS EARNED DURING 1921		$			
Underwriting Profit and Loss Items					
6. Gain from Agents' Balances previously charged off, per item 25, page 2, $______ and from other underwriting income, $______ per Income Exhibit, page 2 (a) ______					
7. Loss from Agents' Balances charged off, $______, and from other underwriting disbursements, $______ per Disbursement Exhibit, page 3, other than losses and expenses per items 14 and 23 of this Exhibit (a) ______					
8. (b)______ from items 6 and 7					
9. Agents' Balances and Bills Receivable Not Admitted Dec. 31, 1920, per item 10 of last year's Exhibit $______					
10. Agents' Balances and Bills Receivable Not Admitted Dec. 31, 1921, per items 34, 35 and 36, page 4					
11. (b)______ from items 9 and 10					
12. (b)______ from Underwriting Profit and Loss Items					
13. UNDERWRITING INCOME EARNED DURING 1921			$		
Losses					
14. Losses paid, per item 13, page 3					
15. Deduct Salvage and Reinsurance Recoverable Dec. 31, 1921, per items (a) ______ page 4					
16. Balance					
17. Add Salvage and Reinsurance Recoverable Dec. 31, 1920, per item 15 of last year's Exhibit					
18. Total					
19. Deduct Unpaid Losses Dec. 31, 1920, per item 21 of last year's Exhibit					
20. Balance					
21. Add Unpaid Losses Dec. 31, 1921, per item 11, page 5					
22. LOSSES INCURRED DURING 1921					
Underwriting Expenses					
23. (c) Underwriting Expenses paid during 1921, per Disbursement Exhibit, page 3					
24. (a) Deduct Underwriting Expenses unpaid Dec. 31, 1920, per item 27 of last year's Exhibit					
25. Balance					
26. (a) Add Underwriting Expenses unpaid Dec. 31, 1921, per Liability Exhibit, page 5, viz.: ______					
27. Underwriting Expenses Incurred during 1921					
28. UNDERWRITING LOSSES AND EXPENSES					
29. (b)______ from Underwriting during 1921....(Carried forward)				$	$

(a) Give statement number of each item or portion thereof included herein.
(b) Write "Gain" or "Loss."
(c) In order to secure uniformity in the reports of the various companies, all companies are directed to include in this item all disbursements except Payments to Policyholders, per item 13, page 3; Agents' Balances charged off in item 28, page 3; Repairs, Expenses and Taxes on Real Estate; such other Taxes and Fees as apply to Investments and Personal Property only, Dividends to Stockholders, Deposit Premiums Returned, Loss on Sale or Maturity and Decrease in Book Value of Ledger Assets, and such other items, if any, as are known to apply exclusively to the assets of the company and to deduct from the total of said items as Investment Expenses one-eighth of one per cent. of the Mean Invested Assets, viz: Real Estate owned, Mortgage Loans, Collateral Loans, and Stocks and Bonds owned.

Figure 1. Underwriting Statement of Underwriting and Investment Exhibit

and the amount of unearned premiums of the previous year, and there is then deducted the amount of unearned premiums at the close of the present year to give the premiums earned, the accuracy of which is plainly contingent upon the accuracy of the estimates of the amounts unearned. If the reserve for unearned premiums of the previous year is excessive, or if the reserve for the current year is insufficient the effect is that the earned premiums are overstated, and where the opening reserve is too low, or the closing reserve is too high, there is an opposite effect, that is, the earned premiums are understated.

To the amount of premiums earned are added other underwriting profit and loss items. The first of these is the recovery of agents' balances previously charged off less the amount charged off during the current year. To this gain or loss is added the gain or loss arising from the difference between agents' balances and bills receivable, both those not admitted at the end of the previous year and those at the end of the current year, the former being added back and the latter deducted. After the effect of a charge to surplus has been raised by the deduction on the annual statement of agents' balances more than 90 days old, subsequent developments in regard to them must be reflected. If such balances have not been collected during the following year either they will be charged off on the general ledger or they will be deducted again as an asset not admitted when the next annual report is prepared. Therefore to avoid a duplication of charges to surplus, the full amount not admitted on the earlier statement is added back, thus also restoring the amounts on which collections have been made. The final gain or loss of this section is combined with the amount of earned premiums to give the underwriting income extended in the third column from the right of the form in the convention blank.

From the amount of losses paid as shown on the disbursements statement is deducted and added the salvage and reinsurance recoverable at the close of the current and previous years respectively, and then the amount unpaid at the end of the previous year is deducted and the losses unpaid at the end of the current year are added. The reason for this is that of the amount paid, part was incurred in the previous year, and on this there were recoveries due for salvage and reinsurance. By deducting the net amount of the previous years losses there is obtained the net amount incurred and paid, during the current year, and to this amount must be added the difference between the amount incurred and unpaid and what is yet to be recovered on settled and unsettled claims.

The final section of the underwriting statement of the exhibit is the underwriting expenses, consisting of those paid during the year as shown on the disbursements, less those unpaid at the beginning, and plus the items unpaid at the close of the current year. In each case that a liability is added or subtracted, reference is made to the statement of liabilities for the current year or to the underwriting exhibit of the previous year. In order to secure uniformity in the reports of various companies, all companies are directed to include in the underwriting expenses paid all disbursements, except Payments to Policyholders.[2] Agents' Balances charged off[3] repairs, expenses and taxes on real estate, such other taxes and fees as apply to investments and personal property, dividends to stockholders, deposit premiums returned, loss on sale or maturity, and decrease

[2] Item 13, Figure 2, June issue of *Administration*.
[3] Item 38, Figure 2, June issue of *Administration*.

Form 2 ANNUAL STATEMENT OF THE ______________________ (Write or stamp name of company) 11

INVESTMENT EXHIBIT | | Gain in Surplus | Loss in Surplus

Interest and Rents

Brought Forward .... $ ____ $ ____

30. Interest, Dividends and Rents received during the year, per item 27, page 2 less item 33, page 3 .... $ ____
31. Deduct Interest, Dividends and Rents due and accrued Dec. 31, 1920, per item 35 of last year's Exhibit .... ____
32. Balance .... ____
33. Add Interest, Dividends and Rents due and accrued Dec. 31, 1921, per item 24, page 4, less items 38, page 4, and 24, page 5 .... ____
34. Add Interest and Rents paid in advance Dec. 31, 1920, per item 33 of last year's Exhibit .... ____
35. Total .... ____
36. Deduct Interest and Rents paid in advance Dec. 31, 1921, per Liability Exhibit, page 5 .... ____
37. INTEREST AND RENTS EARNED DURING 1921 .... $ ____

Profit on Investments

38. Gain from Sale of Ledger Assets, per item 36, page 2 .... ____
39. Gain from Increase in Book Value of Ledger Assets, per item 37, page 2 .... ____
40. Gain from Change in Difference between Book and Market Value during 1921 .... ____
41. Gain from Other Investments, viz:—(Give items and amounts) ____
42. PROFIT ON INVESTMENTS DURING 1921 .... ____
43. INVESTMENT INCOME EARNED DURING 1921 .... $ ____

Loss on Investments

44. Loss from Sale of Ledger Assets, per item 39, page 3 .... ____
45. Loss from Decrease in Book Value of Ledger Assets, per item 40, page 3 ____
46. Loss from Change in Difference between Book and Market Value during 1921 .... ____
47. Loss from Other Investments, viz:—(Give items and amounts) ____
48. LOSS ON INVESTMENTS DURING 1921 .... ____

Investment Expenses

49. (d) Investment Expenses paid during 1921, per Disbursement Exhibit, page 3 (attach exhibit) .... ____
50. (a) Deduct Investment Expenses unpaid Dec. 31, 1920, per item 57 of last year's Exhibit .... ____
51. Balance .... ____
52. (a) Add Investment Expenses unpaid Dec. 31, 1921, per Liability Exhibit, page 5, viz: ____
53. INVESTMENT EXPENSES INCURRED DURING 1921 .... ____
54. INVESTMENT LOSSES AND EXPENSES DURING 1921 .... ____
55. (b) ________ from Investments during 1921 .... $ ____ $ ____

MISCELLANEOUS EXHIBIT | Gain in Surplus | Loss in Surplus

56. Dividends declared to Stockholders during 1921 .... $ ____
57. Dividends declared to Policyholders during 1921 .... ____
58. Remittances from Home Office (gross) .... $ ____
59. Remittances to Home Office (gross) .... ____
60. ____crease in Special Reserves .... ____ ____
61. (a) (b) ________ from Other Sources:
62. ________ .... ____ ____
63. ________ .... ____ ____
64. Net (b) ________ from items 56–63 .... ____ ____
65. Total Gains and Losses in Surplus during 1921 .... $ ____ $ ____
66. Surplus Dec. 31, 1920, per item 73 of last year's Exhibit .... ____
67. Surplus Dec. 31, 1921, per item 30, page 5 .... ____
68. ____crease in surplus during 1921 (enter in column to balance) .... ____ ____
69. Totals .... $ ____ $ ____
70. Per cent. of losses incurred to premiums earned ____
71. Per cent. of underwriting expenses incurred to premiums earned ____
72. Per cent. of investment expenses incurred to interest and rents earned ____
73. Per cent. of total losses and expenses incurred and dividends declared to total income earned (sum of lines 23, 54, 56 and 57 divided by the sum of lines 15 and 43) .... ____

(a) Give statement number of each item or portion thereof included herein.
(b) Write "Gain" or "Loss."
(d) Include in this item one-eighth of one per cent. of the Mean Invested Assets; Repairs, Expenses and Taxes on Real Estate; such other Taxes and Fees as apply to Investments and Personal Property only, and such other items, if any, as are known to apply exclusively to the assets of the company.

Figure 2. Investment and Miscellaneous Statements of Underwriting and Investment Exhibit

in book value of ledger assets, and such other items, if any, as are known to apply exclusively to the assets of the company. From the total of the underwriting expenses thus obtained there is deducted as investment expense one-eighth of 1 per cent of the mean invested assets, viz.; real estate owned, mortgage loans, collateral loans and stocks and bonds owned.

The total of the losses incurred and the underwriting expenses is extended in the third column of the underwriting expense section and is subtracted from the underwriting income earned, to give the gain or loss from underwriting during the year which is extended in the "Gain in Surplus" or in the "Loss in Surplus" columns.

In principle the second part of this profit and loss statement, the underwriting and investment exhibit, that is, the investment statement, is similar to the underwriting statement. From the amount received by way of interest, dividends, and rents, there is deducted the amount due the company at the beginning of the year and there is added the amount due at the close of the year. To the resulting figure is added the amount paid in advance during the previous year while the amount paid in advance during the current year is deducted to give the earnings for the year.

The next section of the investment statement is for profits on investments made up of the gain on the sale of ledger assets, the gain from increase in book value of ledger assets, the gain from the change in difference between book and market values, as well as other gains. The total of the section is added to the previous section to give the investment income during the year, and is also extended in the third column.

Next is entered the loss on investments, the items of which correspond to those of the "profit on investments" section, and to this loss is added the amount of investment expenses. In this item, investment expenses for the current year, are included expenses and taxes on real estate, such other taxes and fees as apply to investments and personal property only, and such other items, if any, as are known to apply exclusively to the assets of the company. A supporting schedule is required to itemize these expenses which, as mentioned in an earlier paragraph, are excluded from the disbursements when determining the underwriting expenses. From this last amount, it will be recalled, there was deducted one-eighth of 1 per cent of the mean invested assets; this amount is now added back as an investment expense. The usual adjustment of unpaid items at the close of the two years is repeated to give the expense incurred during the year, to which are added the investment losses, the total being extended and deducted from the investment income earned. The resulting gain or loss from investments is extended in the gain or loss in surplus columns and the totals of those columns are brought down.

The third division of the underwriting and investment exhibit is captioned "Miscellaneous Exhibit," the main item of which, for a domestic stock corporation is dividends declared to stockholders, and for a mutual company, dividends paid to policyholders. This and other surplus items are indented, and when combined are brought out into the gain or loss in surplus columns and are added to the totals of the underwriting and investment divisions, to give the total gains and losses during the year. The balances of surplus as shown by the balance sheets of the two years, are also indented, and the increase or decrease is entered in the column to balance.

The miscellaneous exhibit also calls for statistical information in the form of percentages of various expenses to earnings. The percentage of losses incurred and the percentage of underwriting expenses incurred to premiums earned are required, and also the percentage of investment expenses to the earnings on investments, the interest and rents, and finally the percentage of total losses and expenses incurred and dividends declared to the total income earned (the sum of lines 28, 54, 56 and 57 divided by the sum of lines 13 and 43 of Figures 1 and 2).

In regard to dividends, the New York Insurance Law[4] provides as follows:

In estimating the surplus profits of a fire insurance corporation for the purpose of making any dividend upon its capital stock, there shall be reserved from such profits a sum equal to the amount of all unearned premiums on unexpired risks and policies, and all sums due the corporation on bonds and mortgages, bonds, stocks and book accounts, of which no part of the principal or interest thereon has been paid during the last year, and for which foreclosure or suit has not been commenced for collection or which, after judgment obtained thereon, shall have remained more than two years unsatisfied, and on which interest shall not have been paid, and all interest due or accrued and remaining unpaid. But no corporation may declare dividends exceeding 10 per centum on its capital stock in any one year unless, in addition to the amount of its capital stock, such dividend, all outstanding liabilities, and the amount of all unearned premiums on unexpired risks and policies as aforesaid, it shall have and be in possession of surplus profits to an amount equaling 30 per centum of its unearned premiums.

Any dividend made contrary to the provisions of this section shall work a forfeiture of the charter of the corporation, and each stockholder receiving any such dividend shall be liable to the creditors of the corporation to the extent of the dividend received in addition to the other penalties and punishments prescribed by law. This section shall not apply to the declaration of scrip dividends by participating corporations. No such scrip dividends shall be paid except from the surplus profits, after reserving all sums as above provided, including the whole amount of unearned premiums on unexpired risks. And whenever any fire insurance corporation shall have accumulated and be in possession of a fund in addition to the amount of its capital stock, and all actual outstanding liabilities in excess of one-half of the amount of all premiums on risks not terminated such corporation may increase its capital stock from such fund; and distribute such increase pro rata to the stockholders of such corporation, provided, always, that such increase shall be equal to at least 25 per centum of the original capital stock of said corporation and shall have been approved by the superintendent of the insurance department and authorized by at least three-fourths of the board of directors of such corporation, and provided, also, that any such corporation may hereafter make and declare a dividend as provided by this chapter.

The effect of this provision of the law is that when the dividend does not exceed 10 per cent, assets uncertain of collection must be deducted from the profits, which, as explained in connection with the underwriting and investment exhibit, are charged with the amount of unearned premiums on unexpired risks. When the dividend exceeds 10 per cent, there must be, after deducting the amount of the proposed dividend, a surplus equal to 30 per cent of the unearned premiums.

If instead of distributing the earnings in cash, a stock dividend is to be declared, the proposal must have the authorization of three-fourths of the directors, as well as the approval of the superintendent of insurance resulting from an official examination.

[4] § 117 Chapter 28, of the Consolidated Laws.

The increase in capital stock must not be less than 25 per cent of the original capital and must not deplete the surplus below 50 per cent of the unearned premiums.

During the time insurance companies that had elected to do so were creating special reserve and guaranty surplus funds, that is, until the time the combined total of these funds was equal to the capital stock, annual dividends could not exceed 7 per cent.

Although in 1915 an amendment to the law was made prohibiting the establishment of these funds and another section was added permitting the discontinuance of them, they are still to be found in a small number of New York companies. The purpose of these funds was the rehabilitation of the company in the event of an extinguishment of capital due to extensive conflagrations.

Assets set aside for the guaranty fund could be used to settle claims arising from such conflagrations, but the assets of the special reserve fund could not be so used. Unlike the guaranty fund assets, the special reserve assets were not retained by the company but were deposited with the Superintendent of Insurance. When losses due to extensive conflagrations exceeded the capital and the guaranty fund, these assets were released to the company and would, with assets equal to the liability for unearned premiums, constitute the capital and assets for the protection of policyholders other than loss claimants, and for the further conduct of the business. Thus even though loss claimants might have been obliged to accept but a part of the amount to which they were entitled, other policyholders were protected, and the stockholders were not subject to a requisition unless the special reserve fund was less than one-half of the original capital.

II

As to the type of organization carrying on the business of fire insurance, there are several distinct classes; as stock companies, mutual companies, Lloyds, and interinsurers incorporated under the laws of any one of the various states, and stock companies organized under the laws of some other country. As to the manner of transacting business, there are two general classes of companies—direct writing and reinsurance.

In describing in the previous articles the various statements of the convention blank and the books and records from which the items in the annual report are obtained, the type of company to which the outline is applicable is a domestic stock company engaged, as practically all companies of that class are, in direct writing. There is but slight difference in the essential parts of an accounting system for the other domestic organizations, i.e., mutual companies, Lloyds, and interinsurers, although there is necessarily a material difference in the appropriation or disposition of the gains and losses, apportionable in these instances among the policyholders, underwriters, or interinsurers.

If a company organized outside of the United States is engaged in direct writing there is no great difference in the general scheme of accounts except that instead of capital and surplus accounts there is an account with the home office to which is closed out, usually monthly, the income and disbursements accounts. If such a company is engaged in reinsurance, many of the normal accounts of a fire insurance company are unnecessary. As, with few exceptions, the United States branches of foreign country companies are engaged exclusively in reinsurance, it is possible to combine a discussion of

such corporations with an outline of the accounting features of reinsurance companies.

Frequently a direct writing company is obliged to issue policies that are in excess of the statutory limit or that cover property in a location in which it is already bound to an extent prescribed by conservative underwriting principles. In order to reduce the amount of risk, the direct writing company must pass a portion of it on to some other company, and while this may be done by correspondence in individual cases, it is more customary to do so by contracts or treaties. The agreement of reinsurance, whether denominated a contract or a treaty of reinsurance, is in effect a *policy* of reinsurance, and has been so treated by the New York courts. The ceding company is the policyholder of the reinsurance company, and unless specifically provided by the policy of reinsurance, the owner of the property insured has no privity of contract with or against the reinsurance company.[5] By the terms of these agreements, the reinsurance company becomes bound to a stated percentage of all or of a portion of the risks written by the direct writing company. The latter will then report the amounts so ceded and the premiums thereon by means of reinsurance bordereaux described in a previous article in connection with the income accounts.[6]

The totals of the cessions and the totals of cancellations are summarized on a monthly account current furnished to the reinsurance company. There is also shown the amount of commission retained as well as a percentage frequently charged to cover general expenses of the ceding company. The balance is the amount due the assuming company and of this amount an additional sum is invariably retained, in accordance with the provisions of the treaty, to be used in the event of a failure to settle losses. The amount so retained gives rise to the item "Funds held under reinsurance treaties," line 29 of the liability statement.

It is thus apparent that reinsurance companies have no agency force and will therefore have no agents' balances on the general ledger, but in place of that item on the balance sheet there will appear the item "Balances Due from Reinsuring Companies." Similarly, there is no need of an underwriting department, with the consequent elimination of such expenses as maps, and inspections, and surveys.

The direct writing company, as soon as it is advised of a loss, notifies the reinsurance company, and later furnishes a statement of the amount paid in settlement and also the adjustment expenses, with the amounts to be paid by the reinsurance company. Consequently, as far as the latter is concerned, losses unpaid and paid become a mere matter of bookkeeping.

When a foreign country corporation is authorized to transact business in the United States, it is required, as a preliminary condition, to deposit securities or other property with a state insurance official and with trustees who hold them for the benefit of policyholders and creditors in this country. Under the law of New York such companies, if authorized to transact the business of fire insurance only, must deposit securities of a value of $200,000 with the Superintendent of Insurance of that state, and must have $300,000 deposited with other insurance departments or state officers or held in trust as mentioned above. If only marine business is transacted, $200,000 must be deposited with the superintendent and another $100,000 deposited else-

[5] New York Attorney General's Opinion, June 22, 1915.

[6] See *Administration* for June, page 719.

where or held in trust. If both fire and marine business is transacted, the superintendent must hold $400,000, with a like amount held elsewhere.

These companies operate under the control of managers appointed by the home office, sometimes on a salary basis, in which event all expenses are charged to the home office and in some cases on a commission basis. Where the latter condition exists, the manager generally pays all expenses excepting losses, adjusting expenses, and taxes and fees.

III

In addition to the usual annual report, foreign country corporations are required to submit what is termed a capital statement. In this statement the company sets up as assets the aggregate value of securities and other property within the United States deposited with insurance departments or state officers and held in trust by trustees for the protection of all its policyholders and creditors within the United States. There is not included any asset in the control of the manager, such as the cash on deposit subject to his check, or agents' balances in the case of a direct writing company, or balances due from ceding companies in the case of a reinsurance company.

Against these assets are applied the liability for unearned premiums, unpaid losses, contingent commissions, reinsurance and return premiums, less commissions due other companies, and all other liabilities, excluding commissions and brokerage on uncollected premiums. From these liabilities a deduction may be made for net premiums, less commissions, on business written within 90 days and reinsurance on paid losses payable by authorized companies from which reinsurance is received in an amount not exceeding the liability shown in the statement for unpaid losses, reinsurance and return premiums, the account of each company to be considered separately and shown in a schedule. In connection with the unearned premiums, it is to be noted that the corporation assuming liability by reinsurance from the corporation issuing the original policy shall maintain a reserve equal to that which the reinsuring corporation would have been required to maintain upon the amount reinsured had it retained the liability ceded by it. It is in this class of companies, United States branches of foreign country corporations, that remittances to and from the home office appear in the income and disbursement statements and also in its miscellaneous exhibit of the underwriting and investment exhibit.

In a few states, foreign country corporations are required to file, in addition to the usual annual report and the capital statement, another report at the time of admission and subsequently each year showing the financial condition of the entire company. This statement of the home office shows all the assets and liabilities wherever located and must be verified by an officer of the corporation and viséd by the United States consuls at the place of business of the company.

IV

A number of fire insurance companies are also authorized to write ocean marine insurance, but because of the highly technical features of that class of business arising in the underwriting and loss departments, many such companies do not handle the business through their own organization. Instead, they appoint specialists in marine insurance as agents to carry on the business.

At one time foreign country companies writing fire and ocean marine insurance were permitted to make separate reports for each class, but at present the results of the two must be combined in a single report. In connection with the annual report figures of the marine department, the only unusual features arise in estimating the liability for losses and for unearned premiums. In regard to the former, the difficulties hardly concern the accountant who cannot do much more than accept the estimates of the adjusters. In regard to unearned premiums there are two classes, one, the time risks, which are calculated in the usual manner, and the other, the trip or voyage risks. On these the usual practice is to reserve the entire premium until the trip has been completed.

V

The importance of preparing financial statements in conformity with state regulations cannot be overemphasized. When the balance sheet is prepared by public accountants, great care must be taken to see that investments are legal, as where they are not, a deduction must be made. It will hardly suffice to accept a certificate of the company's attorney as to the propriety of the investments, for if any are improperly held, they may be included in the certificate through a failure to realize the fact or through an intention to take advantage of the auditor. In any event it is small consolation to the stockholder, who may be obliged to meet an assessment levied by the superintendent, if the subsequent deduction of such investments on the official examination should result in insolvency. The better course to pursue is to consult the officials of the insurance department, who, strange as it may seem to those who have hazy notions of civil service employees, are not only efficient, but are at all times willing to give aid to a policyholder, a company officer, or one of the general public.

THE FINANCIAL SITUATION

BY H. PARKER WILLIS*

AN estimate of the financial situation at the middle of August must be based fundamentally upon the fact that labor controversies of a more or less aggravated type have now been in progress for several weeks. The effect of this state of affairs has already made itself felt in the financial markets; and cannot help being felt even more extensively, no matter when the strikes now in progress may end. Should they continue long, the influence they exert upon the financial situation must be progressively greater. Here is one of those instances in which the close co-ordination between business and finance is illustrated; and in which it appears clearly that normal conditions in one field can scarcely be restored without a return to similarly stable conditions in the other.

Throughout July and the first half of August, however, important factors have been at work to improve the underlying tone of financial conditions. They have been strong enough to offset, in some measure, the injurious effect of disturbed transportation and of shortened coal supply. The most important among them is the great improvement in the crop prospect which culminated in the announcement made by the government on August 10, of a prospective yield in the 17 principal crops of the country, worth about $7,135,000,000, an increase of $1,200,000,000 over 1921. Co-ordinate with this great improvement in agricultural outlook has gone a continuation of the better prospect in the general business field. These considerations have sufficed to maintain the prices of securities and the general level of confidence to a degree that would otherwise have been quite out of the question. The satisfactory character of the general financial outlook has tended to offset the depressing effect of fuel and transportation shortage.

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II

Stock and Bond Values. As it stands, stock market conditions and investment prospects during the past few weeks cannot be considered as affording basis for much complaint. They have on the whole maintained themselves well. Indexes for a group of representative industrial shares show for the month of June an average level of 96.36 as against 96.41 for May while for August the figure will probably stand at about 96.25. The decline from the high level which had been reached during May and June is thus trifling; and it should be remembered that this level itself constitutes an advance of about 15 points over corresponding levels a year earlier. The fact that the market, after making so pronounced a gain has been able to hold it, with but little loss, in the face of conditions so industrially threatening as those of the past month, is very decidedly encouraging. Much the same may be said of the bond and security outlook, a representative index in that field showing a level of 96.25 for industrials toward the close of August as compared with about 95 for July. Bonds have not only held their own but have gained in value for reasons which will presently be stated, but they could hardly have made such a record had there not been

a somewhat corresponding degree of stability in the stock market.

Both in bonds and in stocks, the persistent strength of quotations has in past weeks been rather surprising to conservative observers. Many of them have been inclined to regard the movement as distinctly speculative. The experience of July and early August works strongly against any such assumption. What is called the "public" has not apparently been especially active in the market during the past few weeks, an opinion confirmed in some measure by the relative smallness of the "turnover," which has been characteristic throughout. This turnover has seldom been more than 800,000 shares per day and frequently less than that. The conditions indicate that, while there has been a certain amount of sustained steady buying, the public has not come actively into the speculative side of the market.

This comparative abstention from speculation may be due to any one of a good many factors, but the leading one is doubtless the feeling that, with labor and other conditions as they are, the future of stocks is doubtful. Such doubt is well warranted, for a continuation of existing conditions must inevitably result in so great a shortage of fuel at manufacturing plants as to compel reduction of output. Such limitation of product will inevitably have an unusually injurious influence. Supposing that steel plants, for example, are unable to keep up their rate of production the effect must be inability to maintain the present scale of output in many lines of manufacturing, including motor vehicles as well as in building, with resulting unemployment. The effect of this state of things upon the stock market must be to cut values in a disappointing way.

Present levels of value in the market represent a recovery from low points which had been reached after the advent of deflation in an acute form and which represented belief that inactivity was likely to continue for a good while. Recovery has been the outcome of two factors, curtailment of costs of production, and materially better demand throughout the country, which have enabled many plants to return to something like their old scale of manufacturing. There is, therefore, an unusually close connection between activity of manufacture and level of stock-market values at the present time. The public has rightly waited to see whether the nation was to be plunged into a lengthy industrial turmoil which would cut away the foundation for present prices.

III

Great Banking and Credit Strength. And yet the present financial situation offers a most hopeful prospect, granting only that business may be allowed to proceed steadily and actively. The banking and money side of the situation has seldom been better protected. Not only are the banks of the country in an unusually sound position from the standpoint of power to redeem, but they have also improved their credit position within recent weeks. The great reserve of over 80 per cent of liabilities which is now carried chiefly in gold by federal reserve banks is not being drawn upon at all. On the contrary, federal reserve banks have continued to decline in the amount of credit they have extended, as reflected in the portfolio of bills held by them. They have been almost isolated from the financial market, which has been entirely able to provide for its own necessities without rediscounting.

Several factors have been influential in this state of affairs. One of them is the lower price level, which,

up to two months ago, had so greatly reduced the unit of funds necessary to carry on a business. The price level today despite a rise of 12 points in 3 months is only 162 against 272 at high point after the war. A second and hardly less important influence has been the steady liquidation of the long-term loans which were being carried by many banks in the interior. There is still, without question, a very considerable amount of this "frozen paper" in some regions, but the past month or two has witnessed genuine progress in cutting down its amount. Thus, a very considerable volume of funds for new business uses has been provided.

No small part of these new funds has gone into the stock market. For some time past, the lowering of the rate on bankers' acceptances has rendered them unattractive to country banks, while a good many banks are less favorably disposed toward them than formerly. With the release of their funds from local uses, the country banks have sought a field for their idle money in the stock market, and have found it there, although at rates which have steadily returned a less and less satisfactory income. With a prevailing figure for call funds running from 3 to 4½ per cent most of the time, the market has been able to get its accommodations cheaply, while the country bank has, at all events, made living expenses. There are signs, in some parts of the country, of a commercial demand for bank loans, but this revival has not gone far enough to make much draft upon the leading power of the banks, and it will clearly be a good while before a very severe call is made upon federal reserve bank funds from any ordinary domestic source. Thus the stock market has been able to rest secure in the confidence that it could finance any ordinary business, either present or in early prospect, at a very moderate rate of expense. This state of things makes for higher prices of securities and would have assisted materially in advancing them long before now, had there been any considerable development of the speculative spirit among the public. Restoration of good business may easily be accompanied by a far greater disposition to speculate, accompanied by considerable advances in various classes of stocks.

IV

Demand for Goods. What are these stocks? The drift of business from now on during the remainder of the year will be influenced in no small measure by the harvesting and disposal of the crops. With a satisfactory income realized by the farmer, he may be expected to buy much more freely than heretofore; indeed he is already doing so. Hence the strength of many classes of shares relating to distributive business, and the strength also of concerns whose output goes direct to the farming community to supply its needs for machinery, fertilizers, building material, tools, and other necessities. It is in these industrial groups of shares that the great increases of the early future may be hoped for. What they can do is seen from the very great improvement of earnings which has taken place since the beginning of the year. Not a few of them, which showed considerable deficits at the end of 1921 have wiped out these deficits, while others which had fallen far behind have at least greatly reduced their shortage. It has been a notable feature of current finance during the past few months that many companies have enlarged dividends or practically committed themselves to that policy as a feature of the coming months. The inflated inventories, which were so radically

cut down as the result of after war deflation, have in most instances been well written off where careful finance has been the rule and the various concerns are now ready to resume the accumulation of surpluses and the distribution of earnings. What they can do in these regards will, as already remarked, be the outcome of demand.

And this demand has not been slow to show itself. There has been a steady upward swing in the volume of steel orders, especially of those remaining on the books unfilled. Production has been curtailed to a slight extent by reason of the strike situation. Nevertheless it has gone ahead at a fairly satisfactory rate and has been paralleled by a somewhat corresponding increase in the demand for and production of copper. Leather and leather products, so long depressed, have lately felt a similar impetus. Building permits are about 60 per cent ahead of their level of last year. The output of textiles, although hampered by strikes in the cotton mill regions, has continued, taking the nation as a whole, to maintain itself at a good level. Provided that the farmer can realize promptly on his crops and continue to keep up his demand for commodities, there is every reason to suppose that the far greater activity of business will go on developing and that this greater activity will continue to be reflected in the prices of industrial shares.

But it is not only the industrial issues that have held their own well. Railroad stocks have likewise maintained themselves, and for a somewhat similar reason. The roads have been able to curtail expenses quite materially since the beginning of the year. They have also been able to get an unexpectedly good supply of freight as a result of the better business situation. Carloadings have been decidedly ahead of those of a year ago, and although the loading per car has been less effectively done so that some allowance must be made when estimating the relative amount of freight that has moved, this after all is only a minor factor in the case.

For the coming autumn months the roads may and do look forward to a heavy movement of farm products and of coal which should supply them with traffic fully adequate to require the use of their entire plant equipment. In these circumstances, it is not strange that for the first six months of the year earnings of Class 1 railways have been at the rate of about 4.43 per cent and that there is no reason to doubt the possibility of bettering this figure very considerably assuming reasonable favorable labor and fuel conditions.

V

Special Influences in Bond-Market. An interesting, and in some ways surprising, feature of the financial market, during the past few months, has been the persistent strength of bonds. By many, this has been ascribed to what is called "cheap money"—that is to say, short-term funds loaned at low rates. The effect of the situation, whatever it may be due to, has been to put the prices of many securities well back toward their original or "pre-war" levels. Bonds, in fact, have been, relatively speaking, much higher than stocks. This has partly been the lack of commercial demand for bank funds, resulting in the unusually heavy purchases of securities by financial institutions. To such demand must probably be ascribed the advance of all issues of Liberty bonds to levels well above par. In part, no doubt, the improvement of bonds has been due to the same factors which have driven

stocks upward—an increasing degree of confidence that the makers of the securities would be able to meet them at maturity.

So low were bonds at the beginning of the movement, that there were evident speculative profits to be obtained from operations in them and these were in many cases realized. Bonds usually begin an advance of the kind which has taken place in our market, preceding stocks which follow later. A slowing-down of bond advances then usually ensues, due to the diversion of investment funds to other types of security, as well as to the fact that the advance in prices has practically resulted in the establishment of a firm level of values corresponding to the current worth of money. In the present instance, it would seem as if this movement had carried bonds well up toward the peak of their natural value at the present moment, save perhaps in isolated classes or groups which are retarded.

The declining cost of short-term money and the advance of all classes of bonds to much better values has offered an exceptional opportunity for the government to reduce the cost of its outstanding loans, and it has taken advantage of the opportunity by ordering the calling in of $1,000,000,000 of the Victory 4¾ per cent notes on December 15, while evidently shaping its plans for still more extensive refunding operations. The Treasury's present policy is quite plainly based on the expectation of a rate of about 4 per cent for a government bond at par, and there are some who believe that even this may be at least slightly improved upon should present conditions continue.

VI

Position of Foreign Credit. Foreign credit continues to occupy a peculiar position in the American market. Since the beginning of the year, the United States has been absorbing foreign issues at a rapid rate. This rate is variously estimated from $1,200,000,000 to $1,500,000,000 per annum. This does not seem enormous when it is remembered that for July alone corporate borrowing reached a total of about $228,000,000 as compared with $171,000,000 in July of the preceding year, while for the first six months of the year the total issued ran to about $1,900,000,000. It seems even less striking when domestic stock issues amounting to $634,000,000 for July and to more than $4,000,000,000 for the six months before that are remembered. Nevertheless it is a great increase over the rate at which we had been accommodating foreign countries during the months since deflation set in, and seems to show that, in spite of the bad conditions prevailing in Europe, our surplus supplies of capital in this country are so large that they must be expected to drain off to some extent automatically into other markets.

Still, it remains true that foreign borrowers, and even foreign governments, must continue to pay a very materially higher price than is charged domestically—a fact which itself has been instrumental in leading many investors ordinarily conservative to shift purchases into foreign channels. The outcome of the London conferences on reparations and allied matters that have been in progress have turned out unfavorably and the prospect is correspondingly adverse to further progress now. Meantime exchange rates have held about stable save for the mark which has reached a record low level, little above 7/100 of one cent. If, in the near future, we should be able to lend more freely and with assurance to European borrowers, there need be no doubt that the effect upon

our own market in checking the reduction of interest rates, lessening the demand for domestic securities, and so tending to limit their advance in prices would be a very pronounced one. This now seems hardly likely.

VII

General Conditions. The United States is today in better and stronger financial condition than at any time since the close of the war. Its banking liabilities have been largely liquidated, its government bonds distributed among probably permanent holders, its manufacturing costs in many cases readjusted to a new level of prices, and its productive and saving power (coupled with the enormous importations of gold which have come from other countries) have enabled it to cut rates of interest, advance the prices of securities, and restore approximately normal conditions at a date much earlier than many had predicted. All these favorable conditions may be expected to continue for a good while to come, provided they are not interfered with by legislation of a suicidal sort, or by labor and transportation difficulties which place an embargo upon the movement of goods and prevent masses of individuals from obtaining and keeping employment. If these latter conditions must be only gradually overcome then the enlargement and increase of our present promised prosperity must be expected to be correspondingly retarded and limited.

EDITORIAL REVIEW

THE PROBLEM OF LABOR

In our complex social life we become dependent for the necessaries of life on the continuous activities of certain classes of workers. If any of these classes are permitted to quit their work by concerted agreement—as in the strike or walkout—they can stop the social machinery and bring such distress upon the populace as to force compliance with their demands, no matter how excessive these demands may be. In some occupations we recognize this condition. It is obvious that a strike of firemen could not be allowed. It has been shown in Boston that a police strike will not be tolerated. Yet fuel and transportation are both vital to the welfare of the community and any strike so general as to cause a real stoppage of supplies would eventually be as disastrous as a strike of firemen or police.

Because of this real danger to the whole population, there is no more important problem confronting the country today than the discovery of some fair and practicable method of settling controversies between capital and labor. The bitter and long-continued struggle between the coal operators and their miners, and the menacing strike of the railway shopmen have shown how vital it is to our social and economic future that we find some better method of settling such conflicts of interest than the strike and the lockout.

* * *

Again because of the very real danger to the whole population in the strike or lockout with its incentives to violence and destruction of property and the widespread and disastrous losses resulting from the general economic disturbances involved, the public interest in some peaceful method of settling such controversies without stoppage of production, is superior to the interest of the parties immediately involved, and the public rights are greater than the unrestricted rights of the capitalist in his property, or the right of the workers to stop production by concerted action.

This does not necessarily mean that the capitalist is to lose the ownership and control of his property, or that the worker is to be forced to work against his will, but it does mean that the capitalist's control of property in the operation of which the public is interested must be so modified that the public interests may be protected, and it does mean that the worker's right to work as he will, must be so modified that the injury to the public by planned and wholesale stoppages of industry may be prevented.

* * *

And what is the solution—how is all this to be done? The capitalist has for the most part no suggestion. He would prefer to be let alone. The worker is much of the same mind. His union is organized on a war basis and he is content with that.

In the present number of *Administration* Governor Allen pictures briefly the work of the Kansas Industrial Court, and William Leavitt Stoddard describes the status of industrial courts in other parts of the world. For the great industries upon which the welfare of the nation depends the most hopeful solution of the problem seems to lie along this line.

Labor unions and labor leaders generally, however, object to any compul-

sory settlement of labor disputes either by court procedure or by arbitration. The average labor leader is suspicious of all courts, tribunals, and boards of arbitration. It is doubtful whether employers are more favorably disposed to such methods of settlement than are the labor leaders. They are, however, too politic, and see the handwriting on the wall too plainly to express themselves freely in opposition. It is, however, obvious that difficulties confront the establishment of the labor court.

* * *

The primary difficulty in providing such a tribunal is to secure judges or arbitrators who can decide fairly, justly, and without prejudice. No man can pass upon his own case fairly. Hence in our courts of law a judge is disqualified to sit in any case in which he is interested or in which he is related to, or connected with, the litigants.

The difficulty of finding judges who are free from bias is a serious one. Yet it is imperative that it be done. The labor leaders look with distrust upon a court that will settle their disputes with employers definitely and finally. Employers also look doubtfully upon a tribunal empowered to pass upon wages, hours, and conditions. The organization of such a court must therefore be such as to command respect and, if possible, the confidence of those who may be compelled to appear before it. Its judges should be men of high intelligence and broad views—not necessarily lawyers, for the problems to be solved are social rather than legal and are not to be solved by precedent but by the broad principles of social justice.

* * *

The enforcement of its decrees is another difficulty that confronts the industrial court. It is certain that its successful operation requires that it be able to compel obedience to its decisions. If war between nations is to be abolished and if national differences are to be settled by an international court it is certain that such a court must have authority to enforce its decrees. Likewise a court to supersede the private wars between employers and employees must have power to enforce its decisions. The present dangerous strike on our railways is due to the fact that the United States Labor Board has no such power. It decides, but neither employer nor employee need respect the decision. It should be possible to enforce the court decisions in labor disputes and make it profitable to obey and unprofitable to disobey, without in any case depriving the owner of his property, or making the employee work at the point of the bayonet.

All this for the great industries and serious disputes that cannot be settled within the wall of the shop, or office, or factory. For the settlement of minor difficulties and the prevention of major differences as far as possible, we must depend upon the cultivation of better relations between employer and employee. Much has already been done in this direction; more must be done. This is the character method referred to in Mr. Stoddard's article, and as stated by him "is never out of date, and, in the last analysis, underlies every other means or method that may be attempted."

The results to be obtained by a peaceful settlement of labor disputes, i.e., the uninterrupted production of goods, the regular payment of wages, the increase in general prosperity, are material and of enormous value. The industrial quiet that would ensue, and the greater stability of the Republic itself would be beyond valuation.

FORESIGHT IN BUSINESS

In discussing the part played by luck and chance in the affairs of man, Professor Ely instances two men of "like intelligence and capital" both thrifty and industrious, who bought farms in western New York in the early 60's.[1] One married and began his farming operations in time to advantage greatly by the high prices that prevailed during and immediately after the Civil War. When deflation came on he had paid for his farm—bought at the low prices that obtained before the war—and was in a position to buy other farms during the period of falling prices.

The other man, being younger, married and began farming operations at the peak of the Civil War prices. Before he had even got a firm foothold prices began to tumble. He worked day and night, practiced thrift, but could not overcome the adverse conditions. Things went badly with him and, ultimately, the mortgage on his farm came to have pretty nearly the value of the whole farm.

> The first man died prosperous at a ripe age; the second died young and broken-hearted. The essential difference was that one was born at one time and another at a different time. One man had no more to do with bringing on the Civil War than the other, and practically neither one had any more control over the events that led to the Civil War than over the movements of the tide. Nor is there any reason to think that one had more insight into price movements than the other.

Probably neither of these men had any insight into price movements or the economic probabilities. This is apt to be true of the ordinary man at any time and any place, and his success or failure is therefore largely a matter of chance—"one is fortunate, the other unfortunate," and that is apparently all there is to it.

* * *

But on the other hand, take an instance in the life of a business leader who brought scientific foresight into his business activities—E. H. Harriman.[2] His was essentially a constructive nature. He believed in making money by spending money, and when he took hold of a run-down railroad, such as the Union Pacific, picturesquely described as "a streak of rust and a right of way," he was in his glory, expending money with a lavish hand, putting in new ties, eliminating curves, reducing grades, building heavier locomotives, purchasing freight cars, installing safety devices—doing everything that would serve to increase operating efficiency, and, as a result, operating profits. This was characteristic of the man. Yet with all his apparent recklessness every important move was governed by foresight and discretion.

In 1890 a special committee appointed by the directors of the Illinois Central—of whom Harriman was one—recommended the expenditure of many millions of dollars for the expansion and improvement of the system. Harriman was ill at the time and the committee's report was sent to him at his home. The recommendation was entirely in accord with the policy he had steadily favored throughout the entire period of his association with the road, and no one doubted that he would approve it. Harriman, however, wrote back in strong disapproval, stating that in his opinion "it would be unwise at this time to pass any resolution adopting a policy for a large expenditure of money," that "our whole

[1] *Administration*, May 1921, page 577.

[2] Told in Kennan's "E. H. Harriman—A Biography," pages 88–92.

force should be devoted to *making* and *saving* money," and wound up by stating that if he were present he would vote against the adoption of the policy which had been recommended so confidently by the committee.

Harriman's fellow directors were, as may be imagined, "more than surprised." Here was the most eagerly progressive man on the board, who had often urged expenditures and expansion when other members were inclined to hold back, and now, when all others were in favor of going forward, he alone urged economy and restraint. So great, however, was Harriman's influence that the proposed program of lavish expenditure was abandoned.

A few years later just at the time when the Illinois Central would have been in the midst of its heavy expenditure had the committee's recommendation been adopted, the financial crisis of 1893 broke over the country and swept into bankruptcy not less than 150 railroads with an aggregate capitalization of over $2,500,000,000. Among these were the Erie, the Baltimore and Ohio, the Southern, Reading, Union Pacific, Northern Pacific, and the Atchison. The Illinois Central, on the other hand, thanks to Harriman's foresight, went through the panic and ensuing years of depression without embarrassment, with the highest credit, and without passing a dividend.

Otto Kahn, in commenting on this episode said:

> The Illinois Central's finances were managed with remarkable skill and foresight. Somehow or other it never had bonds for sale except when bonds were in great demand. It never borrowed money except when money was cheap and abundant. Periods of storm and stress found it amply prepared and fortified; its credit was of the highest.

* * *

But Mr. Harriman was a man of pre-eminent ability, both as a business man and a financier—if the two can be separated. Is such foresight possible to the everyday financial manager who is not of pre-eminent ability?

In the annual report of the International Harvester Company for the year ending December 31, 1921, appears the following self-explanatory comment on the inventory valuation:

> In the early years of the war, the officers and directors realized that the advance in prices of raw materials would affect this industry in a peculiar way. It was evident that if the inventory were valued according to high war-time prices, the profits would be materially increased; and when, after the war, the inevitable decline in prices occurred, the company would be confronted with large losses due to such declines. . . .
>
> In view of these facts, it was decided that so much of the inventory as represented the portion constantly on hand (termed the basic inventory) should be valued at pre-war (1916) prices and carried on the balance sheet at those prices; and that fluctuations in values should be reflected only in the amount of the inventory carried in excess of the basic inventory.
>
> The inventory at the close of 1921 was valued at the then cost or market, whichever was lower, and is so valued in this balance sheet. The company shows a net profit for the year 1921, notwithstanding the decline in value of the inventory. Had not the company adopted conservative methods in valuing inventories during the past few years, the balance sheet for 1921 would have shown a net loss in excess of $20,000,000.

The managers of the International Harvester Company are, of course, men of large experience and ability, versed in the management of financial affairs. They do not, however, claim to be financial geniuses or men of phenomenal ability. Their striking success in this matter was neither chance nor luck but simply a case of business foresight based on experience and

knowledge—foresight that was equally possible in almost every other business in the United States—foresight that saved their company a loss of $20,000,000.

It may be said that, in part at least, this loss was only a paper loss—they did not "mark up," hence did not need to "mark down." True, but how many concerns did "mark up" and then disbursed hard cash on the basis of their paper profits in dividends and avoidable expenditures and had a very sad day of reckoning when the day of reckoning came? Of the great industrial concerns of the country 23 showed inventories for 1921 aggregating $715,091,762, as against inventories for 1920 of $1,199,330,639.[3] Happily most of these concerns were able to stand the loss involved. But why should they have been called upon to stand such terrific losses? The International Harvester Company was not, and its experience points the moral of the present discussion.

* * *

Professor Ely's farmers were entirely ignorant of the economic principles that govern prices; of the inflation that accompanies lavish expenditure; of the deflation that follows its cessation. They lived in and were concerned with the present and took chances on what lay beyond. "One was fortunate, the other unfortunate."

Harriman was a man of unusual powers of observation and deduction, and on these he based his very effective business foresight. Though he died a multimillionaire and perhaps the leading railroad man of his day, it cannot be claimed that he was merely "fortunate." He was "far-sighted" and knew how to utilize it to his business advantage.

The managers of the International Harvester Company were men of large experience and ability, and they, too, looked into the future, but they used data and methods in reaching their conclusions that are open to every business man in the country. Their foresight was worth millions of dollars to their company.

This foresight, this looking into the future and charting the course of business is a feature of modern commercial development. It should be a part of every intelligently managed undertaking. It must be if the largest measure of success is to be attained. But foresight must be based on "hindsight." As stated in an article appearing elsewhere in this number of *Administration*[4] "the only basis in the material world for estimating the course of the future is the events of the past." In this day of widely distributed information it is not difficult to secure the records of the past that will serve this purpose.

As to outside conditions, the government broadcasts information as to the weather and the state of the crops, also as to any economic and business conditions at home and abroad that may affect commerce and trade. Private concerns are supplying business barometers, charts, forecasts, and data along widely diversified lines. The public prints supply all the general information that is needed to give background and coherence.

For internal guidance, detailed and classified records and statistics give, for every department of the well-organized business, a complete and clean-cut presentation of past accomplishment and present condition, and this, coupled with adequate information as to outside conditions and trends, and the expert judgment of those most closely interested, gives a dependable basis for "plotting" the

[3] *The Wall Street Journal*, March 10, 1922.

[4] "The Development of Business Forecasting," page 269.

business achievements of the future. The charts and co-ordinated "budgets," and the estimated profit and loss statements and balance sheets based upon these, which express the results of such "forecasting," are usually fairly dependable and are sometimes of astonishing accuracy, showing in detail what the business should do, the conditions under which this should be done, and supplying standards to which to work.

Of course all predictions and forecasts, both external and internal, may be falsified by errors and by conditions or happenings that could not have been foreseen. Nevertheless the business forecast, expressed in the form of charts, budgets, and estimates, does give definite direction to business effort and a means of judging accomplishment; also such forecasts may be readily changed as occasion requires to meet unexpected conditions or to correct errors. The use of such forecasts is scientific determination as opposed to chance—intelligent direction as opposed to drifting.

Because of the very great importance of business "forecasting" and of the best use of such forecasts when made, *Administration* will, during the coming year, give special prominence to the subject of business forecasting and particularly to the principles and the practice involved in the preparation and use of the budget.

For the same reason there have been added to *Administration* as regular monthly features the broad general outlook of "The Financial Situation" by Dr. Willis, treating of those important happenings of the preceding month which a business man must know in order to intelligently direct his general policy, and Dr. Haney's "The Business Trend" showing graphically the movements of certain definite factors which are so sensitive to changes in business conditions as to indicate its trend and thereby assist the executive in shaping his course.

BOOK REVIEWS

RAILROADS AND THE GOVERNMENT: THEIR RELATIONS IN THE UNITED STATES, 1910-1921

By Frank Haigh Dixon, Ph.D., Professor of Economics, Princeton University. xvi, 378 pp. Charles Scribner's Sons

REVIEWED BY CLYDE OLIN FISHER *

Professor Ripley, in his book on "Railroads: Finance and Organization," says that the decisions of the United Supreme Court in applying the Sherman Act to the railroads "demonstrate that the avowed purpose of the people to perpetuate railroad competition is accepted as an established fact." And it did seem, at the time Professor Ripley wrote, that his conclusion was warranted. Since that date the experience of the government in operating the railroads during the war has done a great deal to remove former prejudices and to prepare the public to look with favor upon the recognition of the inherent monopolistic characteristics of the railroads. An examination of Professor Dixon's book will show to what extent our views have been revolutionized.

Professor Dixon does not attempt to write a comprehensive book on the entire railroad problem. Rather, as he himself says, he is building upon the foundation laid by other economists and is bringing the material and the discussions down to date. He divides his book into three parts: Regulation from 1910 to 1916; The War Period; and The Return to Private Operation. He explains the inadequacy of early railroad legislation on the ground that Congress lacked the knowledge needed and the members of the Interstate Commerce Commission also found themselves ignorant of the technique of railroading. Further, the jealousy of the judiciary of the prerogatives of the Commission played a part.

The Interstate Commerce Commission, according to Dixon, was not responsible for the deplorable financial condition of the railroads in the period preceding the war. This was a result of the fact that investors began to realize that rates were subject to regulation. The uncertainty of returns, the revelation of spectacular financial manipulations and mismanagement of some roads, the fallibility of the Commission which could not predict with accuracy the effect of any rates allowed, all had a part in making the financial condition of the roads poor.

Although the book is written in an interesting style and covers a wide range of topics, the reader is often disappointed when the author dismisses a problem with the statement that this is not the place to treat it adequately. Thus, the question of the proper basis for the valuation of railroads (p. 70) and also that of depreciation. Certainly, the book would have had more of interest for the students of transportation had it been possible to discuss such questions at length. Dixon does, however, favor the valuation of the property of the roads and he thinks that much is to be accomplished thereby (p. 76).

The reader will find most of value in the second and the third sections of the book, mainly for the reason that the author is here writing of developments which have not heretofore received sufficient study. The Railroads' War Board, Dixon holds, proved the desirability of co-operation of the roads and paved the way for the success of the War Administration (pp. 110-111). Upon the whole, the author thinks that the War Administration succeeded in the operation of the roads. In fact, he proves that such control was essential and that any alternative would have been disastrous.

* Professor of Economics, Wesleyan University, Middletown, Connecticut; Author of "Use of Federal Power in the Settlement of Railroad Labor Disputes."

However, he does not regard with favor the government operation following the armistice when the patriotic urge no longer actuated management or men. During the first period the government did succeed in operating the roads as a means of winning the war and it also increased the efficiency and decreased the cost of the service, the main objects had in mind in taking over the roads.

As to rate regulation the author shows what has been done and comments critically thereon. But he does not present his own basic theories as to the proper methods and criteria of fixing rates in general and specific rates as related to others.

The various proposals, including the Plumb Plan, leading up to the passage of the Act of 1920 are given in some detail. Dixon thinks the bondholders have a right to participate in the shaping of railroad policy. They are no longer mere creditors having no legitimate voice in management. Bondholders now realize, he holds, that railroads secure capital from them for permanent investment and that the real security behind such investment is the earning power of the roads (pp. 220–221). In this respect Professor Dixon is in accord with the most recent theory as to the relation of bondholders to the corporations to which they have supplied capital.

The analysis of the Act of 1920 is given at length. Dixon shows that this law is merely the crystallization into legislation of the experience of the government in operating the roads during the war. He shows how this law revolutionized our methods of railroad regulation, placing more responsibility upon the Interstate Commerce Commission and giving it the burden of supplying adequate transportation facilities (p. 246). To accomplish this end the Commission was given a large degree of control over intrastate rates, a control which has been sanctioned by the Supreme Court since the publication of this book.

One of the most thoroughly discussed topics in the book is that of the labor problem. The author errs, however, in saying that the national legislation dates back to 1898 with the passage of the Erdman Law. As a matter of fact, Congress took the first step in this direction in 1888 by passing a law providing for voluntary arbitration and also for the appointment of a commission to investigate railroad labor disputes. It was under the authority of this law that President Cleveland appointed the commission to investigate the Chicago strike. Further, this law paved the way for much that was incorporated in subsequent legislation covering this field.[1]

On the whole, the discussion of the labor problem is without bias and shows the result of a great deal of study and research in this field. This part of the book is comprehensive and gives an excellent presentation of the points in the development of machinery of adjustment. The reviewer does not agree with the author with reference to the Labor Board when he says that "no railroad corporation and no reputable labor organization will lightly incur the odium consequent upon a violation of the law." The author here overlooks the fact that public opinion is crystallized only when the public is subjected to inconvenience. This inevitably results when labor ignores the orders of the Board and calls a strike. But this is not the case when a railroad refuses to comply with the rulings of the Board. In such case an interruption of traffic does not necessarily occur and the attitude of the public is often one of indifference. Already this has been demonstrated.

Professor Dixon says that the railroads at the present are in a state of "unstable equilibrium" (p. 340). He makes several constructive proposals: Give labor a share in the earnings and in the management of the roads (p. 355); substitute for the right to strike the judgment of an impartial tribunal which is to make awards on the basis of a scientific labor code; and, perhaps most significant, work out a proper coordination of the different railroads and between the roads and other transportation agencies. The reviewer is in thorough accord with the author as to his constructive suggestions. Professor Dixon has written a book that does credit to his scholarly reputation as a student of the railroad problem.

[1] On this subject, see Fisher, "Use of Federal Power in the Settlement of Railroad Labor Disputes," Chapters 1 and 2, Bul. 303, Bureau of Labor Statistics.

PUBLIC OPINION

By Walter Lippmann. Formerly American Correspondent for The Manchester Guardian, and Associate Editor of The New Republic. Now on the staff of The New York World. x, 427 pp. Harcourt, Brace and Company

MANHOOD OF HUMANITY

By (Count) Alfred Korzybski. xiv, 466 pp. E. P. Dutton and Company

THE MIND IN THE MAKING

By James Harvey Robinson. Lecturer in the New School for Social Research, sometime Professor of History in Columbia University, v, 235 pp. Harper and Brothers

Reviewed by Robert L. Smitley *

The outstanding characteristic of the American business man is his laziness in connection with thinking. For some years past he has demanded that writers and editors do his thinking for him, handing out the conclusions in the form of sugar-coated pills, predigested. This laziness in thought on the part of the average man has been the cause for much loss in business enterprise as well as much discontent in the home life.

Since the war there is some inclination to do a little original thinking. The effort is not great but it is at least a beginning. Whether or not it is likely to continue in intensity depends to a great extent upon the abilities of the present-day authors to get down to practicality and to eliminate all forms of metaphysical discourse, dished out in difficult grammatical construction and in the involved terms of the logician.

The three books which offer themselves as something new in the realm of deep, strenuous thinking, but which are presented in such clarified form as to be capable of understanding by the average human being, are "Public Opinion," "The Manhood of Humanity," and "The Mind in the Making." Each of these books presents something new in the treatment of our human difficulties and each of them at least suggests a practical solution which is worthy of every man's consideration.

* Formerly Cashier for Shearson, Hammill and Company.

"Public Opinion" is a fundamental investigation which deals with such everyday problems as censorship, propaganda, publicity, electioneering, news, and intelligence work. The author, well qualified for his work, opens up the inner workings of the specialists. Those who carefully read what is said in this book are likely to become very skeptical regarding future magazine and newspaper articles which they may read. But in the end, they will learn to do some thinking, to search out the facts and brush away the personal viewpoints of any writer, and finally to detect the essentials so that deception will be much more difficult. We have endured such a field of propaganda during and since the war that the habit has been contracted by those who were successful in its use, for application at all times. Throughout the financial district, we find many investment and brokerage firms advertising "analyses of securities." Ratings of companies are made by various concerns, which ratings are sold for money. Economic groups collate statistics and from these collations, services are offered to the public which services are sold at prices ranging from $50 to $1000 per year. It is assumed that the average man either cannot collate these statistics for himself or if he does collate them he does not know enough to interpret them in terms of application. One of the excellent results of "Public Opinion" is the manner in which it rates the politician of today. The

exposé of his methods should be sufficient to make the voter writhe in anger. In fact if the book does nothing else, it should have a very salutory effect upon the selection of individuals to represent the voter in a legislative assembly.

"The Manhood of Humanity" applies the science and art of engineering to our methods of living and to the human being. This book will find extreme value in the hands of every executive and in fact should be read by every man who has under him the supervision of the work of other men. It is the application of new ideas to mankind. It brings into play the principle of the fourth dimension as applied to humanity. It shows man as "time-binding" differing from animals who are but "space-binding." It applies mathematics to the science of living and brushes aside the old static viewpoints of economics, ethics, theology, and politics. The author gives formulae which are sufficiently simple for the layman to comprehend and goes further in attempting to prove his case than the average writer. Reverting back to "Public Opinion," the book is free from propaganda and offers an opportunity for the individual to do his own thinking.

It is interesting to note that the author does not attempt to establish any hypotheses and then deduct. His work is induction from the start and is produced from the workings of a mathematical mind. He very nicely proves that science has progressed on a geometrical ratio (2—4—8—16—32—64—128 . . .) while the method-of-living "sciences" have progressed on an arithmetical ratio (2—4—6—8—10—12 . . .). We have therefore brought about a spread between science and standards of living from which there is now no contact. This lack of contact has caused an uncertain and unfortunate condition of affairs which is making for the unrest of mankind. Until the equilibrium of these two factors is adjusted, there can be no "getting along" from the viewpoint of the relationships of man to man. Wealth, Capital and Labor, and other economic factors are treated for the first time in this book from a purely mathematical viewpoint. The reader will have sufficient food for thought as well as application to last a long time.

Possibly the best expression of the value of this book is made by A. F. Sheldon, President of the International Rotary Club, who remarks:

> In my judgment the book is potent with possibilities of being a mighty contributing factor in the restoring of financial equilibrium and economic balance throughout the world and the bringing about of a status of justice to all parties concerned in industrial and commercial relationships—employee as well as employer. Anyone who reads not only the lines but between the lines, as all executives should be able to do, cannot fail to see in the truths revealed by this epoch-making book the possibility of making a long stride toward putting the problem of human relationships, including those of commerce and industry, on the plane where they belong.

It is quite likely that the excitement over the book expressed by this critic is due to having read the book and made his statement in the heat of appreciation. But even allowing for this condition of mind the quoted remarks will not be out of place if they succeed in influencing others to read for themselves. It will be noted that the author has not completely separated his "time-binding" man from his "space-binding" animal but he has at least brought forward a germ which is likely to have a very determinate effect upon future industrial relationships.

With respect to Dr. James Harvey Robinson's "Mind in the Making," it may be worth while to inform the reader that his ability to interest classes at the university is so great that it has become next to impossible to get into them. The remarkable characteristic of this writer is his clarity and simplicity in presenting one of the most difficult subjects in the realm of writing—the human mind. The tendency to rationalize on the part of the business man is probably more accentuated in the United States than elsewhere. The old methods are accepted and it is most difficult to accept a new version. In this book there is an indication that the author has been somewhat influenced by Count Korzybski but the application of the "time-binding" principle is not wholly accepted, nor is it rejected. The author takes us through the savage mind, the child mind, up to the so-called civilized mind. In his

discussion he tells us of the various manners in which we think—including our reveries and our wasteful periods—and brings us to the point where he shows the necessity for thinking in a creative manner.

Creative thinking will likely do more to assist the individual to "get along" than thinking which bears upon a previous method which we make static by our rationalizing. This is excellently developed, in fact, by a résumé of the thinking of peoples in the Greek, the Mediaeval, and the Industrial eras. When one finishes the résumé of the past and tries to apply such types of thinking to the present—taking into consideration the advance of science—it will at once become apparent that there is no relation between former methods of thought and what is necessary for present progress.

These three books are stepping-stones for a better understanding of the relationship of man to man. Possibly none of the three could be considered sufficiently a masterpiece to go down into coming generations. They are real thought-food for the business man. They are not specific books dealing with the mechanics of part of the economic structure, but they attempt to deal with what were formerly considered the generalities of living; the method is new. The service which they are likely to do is great. The service may be gained through the fact that empiricism is relegated to the discard, and commonsense application takes its place.

EXPERIENCE WITH WORKS COUNCILS IN THE UNITED STATES

Research Report Number 50, 183 pp. National Industrial Conference Board

Reviewed by Bryce Haynes *

In October 1919 the National Industrial Conference Board issued a report on "Works Councils in the United States." This report contained the results of an inquiry which included in its scope all Works Councils known to have been organized up to August 1919. Practically all of the 225 Works Councils considered in this study were formed since January 1, 1918 and included 86 such councils created as a result of awards of the National War Labor Board, as well as 31 established through decisions of the Shipbuilding Labor Adjustment Board. There were, in addition, three wartime "Government Committees" while only 105 Works Councils out of the total had been voluntarily instituted by employers.

This report reviewed the history and evolution of Works Councils, discussed their distribution among the states and in industries, outlined the general type of organization, described their functions and activities, and devoted one chapter to an account of the experience with these employee representation plans.

"Experience with Works Councils in the United States" is the title of a report just issued by the National Industrial Conference Board. This publication supplements the previous study by an analysis of experience with such organizations up to date as revealed in statements of employers, foremen, and employees.

This new report is divided into three parts. Part I deals with "Representative Committee Systems which have been Discontinued," Part II considers "Works Councils in Operation," while Part III is devoted to "Employers' Opinions as to the Value of Works Councils in Industry."

The report, further, after a short introduction sets forth in a general summary of less than 10 pages an excellent digest of the entire study.

The Board finds in its investigation that most of the "Shop Committees" established by the National War Labor Bureau and the Shipbuilding Adjustment Board during the World War, have ceased to

* With the United States Rubber Company, New York City.

function. An explanation for this is found in the fact that all of these committees were established in plants by order of an outside agency and not through the wish of employers or employees. The removal of this outside intervention thus naturally ended the life of these committees.

Of the representation plans voluntarily established relatively few have been abandoned. Of these, about half were discontinued because the plants were shut down entirely, or the force greatly reduced during the business depression. The chief reason in other instances seems to have been due to the inability of management to "sell" the idea, or to the opposition of trade unions either within or without the plant.

In spite of the discontinuance of plans established by these government agencies and the few councils which have ceased to function, as noted above, the report discloses the fact that a far greater number of employers have instituted councils in their plants, so that in February of this year there were no less than 725 such plans in operation throughout the country.

Changes which have been made in Works Councils plans have been few and, where made, have been in the nature of minor improvements to better adapt the plan to requirements unforeseen at the time of establishment. This brings out the important fact on which the report lays stress, that there is no "model" Works Council plan which may be applied indiscriminately to all industrial concerns. It is further pointed out that it is most desirable that any such representation plans should be flexible enough to admit of ready adjustment to new conditions as they arise.

The investigation further brought out the fact that when Works Councils are first adopted there is a tendency on the part of employees to use the plan chiefly as a means of clearing complaints and grievances. In a few instances this remained the principal use which employees made of the Council. Where this was true the explanation was to be found in the failure of management to take an active interest in the Works Council.

In the majority of cases, as the Council plan became better understood, employees made less use of the Works Committees for the presentation of complaints and grievances, and there was a corresponding increase in the interest with which they took up questions pertaining to general business conditions and plant efficiency. To quote:

> In practically every plant covered by the present investigation, [says the report] the effect of Works Councils upon relations between management and men was reported as beneficial. Statements of employers and employees were in unanimity with reference to this. The improvement in the relations between management and men was attributed to the opportunity afforded by a Works Council for an employer and his employees to come into direct and intimate contact with each other and to learn each others' views. The employees are thus furnished the means of communication with the higher executives of a company and enabled to meet them as man to man. Where Works Councils are in operation foremen no longer exclusively interpret to the employees the aims and policies of management; employees learn from management itself its attitude toward them.

The attitude of foremen toward Works Councils is a most important question. On this point the investigation showed that where foremen have been antagonistic toward employee representation plans at the time of their installation, either experience, or education as to the real function of such plans have had the effect of bringing about co-operation and support. In fact, one of the outstanding benefits of such plans, according to the collected opinions, has been the better spirit fostered between foremen and workers.

From its study of the large number of Works Councils reviewed in this report the Conference Board emphasizes certain conditions as essential if such plans are to function successfully. These conditions may be best set forth in a few sentences from the report itself:

> In the first place, both management and men must be in favor of an employee representation plan as a means for the adjustment of their differences and for the betterment of their industrial relations.
>
> In the second place, it must be recognized that the machinery of any plan is but a means to an end; the desired objects will be accomplished only if there is present mutual confidence and

wholehearted support by those for whose benefit the plan is established.

In the third place, after an unbiased study of the Works Council movement one cannot fail to lay emphasis upon the importance of the manner in which a Works Council is introduced. The unanimous opinion of the Board's correspondents is to the effect that a Works Council should not be established in a plant without giving the employees a voice in its foundation.

Finally, it must be realized that the employer who looks to the Works Council as a means of gaining the confidence and good-will of his employees cannot expect to secure these unless he gives the Works Council constant and sympathetic support.

The general summary of this very excellent investigation contains the following pertinent paragraph which may well be quoted in full:

> Looking upon the Works Council movement in its broader and more fundamental aspects, the results of the Conference Board's study seem to re-affirm the basic contention that the labor problem within the plant, that is the problem of the relationship of employer to employed, is after all primarily a management problem. From this it follows naturally—and the experiences of employers related in this report are ample evidence of this—that unless management in each individual establishment adopts an enlightened attitude toward the labor problem and concerns itself personally with the various phases of the problem and with their adequate solution, the most elaborate and highly perfected plan will fail of its purpose.

THE NEW LATIN AMERICA

By J. Warshaw, Ph.D., Professor in the University of Nebraska; Corresponding Member of the Hispanic Society of America. With an Introduction by James E. LeRossignol, LL.D. Dean of the College of Business Administration, University of Nebraska. xxi, 415 pp. Thomas Y. Crowell Company

Reviewed by Royal J. Davis *

By "new" Dr. Warshaw means "contemporary" with the added idea of "onward moving." He desires to present a picture of the America that lies south of us, a picture that will not show Latin America merely as it is at the moment but that will suggest the progressive spirit that he finds animating its people. His purpose is frankly to "sell" that America to the America of the northern continent. He wishes to give us a better appreciation of both the business enterprise and the cultural attainments of the inhabitants of Mexico and of Central and South America.

Anyone undertaking a task like this is exposed to a great temptation—the temptation to exaggerate. Fearing that the simple truth may not impress his readers, many a writer lays on the colors until the imagination of even the dullest is stirred. Exaggeration is sometimes defensible, but Dr. Warshaw manages to get along without it. This does not mean that he makes no effort to appeal to the reader's interest. On the contrary, his book is one of the most readable as well as informative volumes that have been written about Latin America. Here is an illustration of his ability to seize upon picturesque details:

> A stall in the opera at Montevideo costs $12 and a box $80; and $50 to hear eminent singers like Caruso at one performance is not an unusual price. Membership in the Jockey Club of Buenos Aires costs over $2000 in initiation fees and more than $600 as annual dues: but this can scarcely seem a high rate in Argentina, where millionaires are more numerous in proportion to population than in any other country in the world. The bets made every year at the Hippodrome of the Jockey Club in the Parque de Palermo run well over $25,000,000.

This passage is not inserted in Dr. Warshaw's volume as a relief from more prosaic matter. It is given a place because it serves better than any number of bald statements to convey an idea of the wealth of Latin America.

So much is said in criticism of our com-

* Political Editor of *The New York Evening Post*, New York City.

mercial relations with the countries to the south of us that persons who consider themselves well informed may be surprised to be told that in 1920 we did business with Latin America to the amount of $3,000,000,000. Our total foreign trade in that year amounted to $13,500,000,000. Thus our dealings with Latin America constituted almost a fourth of our entire import and export trade. It was more than double our trade with Canada and larger than our trade with all the rest of the world outside of Europe. Had we done business with the whole world upon the scale of our Latin American transactions, our foreign commerce would have reached the stupendous total of $75,000,000,000. We have gone ahead of our two great rivals, England and Germany, in Latin American trade.

The figures, however, need to be analyzed. Dr. Warshaw omits to mention that of our $3,000,000,000 worth of trade with Latin America, more than half was with the West Indies, Mexico and Central America, leaving less than $1,500,000,000 for all South America.

Our leadership, he observes, is not to be explained by the war. On this point he remarks:

> Great Britain and Germany have been making unheard-of efforts to regain their old status, and have been favored by their depreciated currency, by the prèmium on American money, and by their imperative need of the largest possible outlet for their products; yet the United States retains the gains which it made during the war and is consistently adding to them.

It would be suicidal, however, to suppose that the battle for commercial supremacy in Latin America is won. Dr. Warshaw's closing pages are devoted to a warning of the necessity of guarding what we have achieved. The Latin American is not dependent upon us. He can turn to Great Britain or Germany or both, to say nothing of Japan, which has an important position upon the west coast and is opening banks and investing capital at various points. We are not congenial to the Latin American. His ideal is the Parisian, beside whom we appear as Philistines.

It is true that the Englishman in Latin America preserves the qualities that repel visitors to his native land. He lives very much as he lives at home. He "maintains an attitude of aloofness, sticks to his English habits, plays his English sports, has his five-o'clock tea, dresses in the English style, and surrounds himself with architectural and scenic beauties reminiscent of his beloved Albion." But despite this refusal to adapt himself to the ways of those with whom he is endeavoring to do business, the Englishman has been able to inspire confidence in the Latin American more easily than either the American or the German. The secret of this success is the Englishman's confidence in Latin America and the Latin American. Trust begets trust. Englishmen do not hesitate to invest in Latin American properties or securities. And they are jealous of their reputation. No higher tribute has ever been paid by one people to another than that embodied in the phrase, "the word of an Englishman" (*palabra de inglês*), which "is the gold standard of commercial honor throughout Latin America."

If we wish to contend with our European rivals upon an equal footing as they recover from the effects of the war, we shall have to cease trying to force our customers to accept our business practices; we shall have to yield them the courtesy to which they are accustomed; we shall have to alter our credit system; in a word, we shall have to conform more closely to their desires. The opportunity is extraordinary.

Dr. Warshaw's chapters upon the political, social, and educational progress of Latin America are as illuminating as those upon business. He does not gloss over deficiencies but he notes developments that promise improvement. One of his most useful devices is the method of comparison. Sometimes he employs it to draw a parallel between this country as it was and Latin America as it is; sometimes he compares the two regions as they are today. He strives to be fair, with the result that an inhabitant of either part of the hemisphere can turn his pages with profit in a better knowledge of himself as well as of the other fellow. Appendices contain condensed information about the various countries of Latin America, and the text of the book is supplemented by maps and illustrations.

EFFECTIVE DIRECT ADVERTISING

By Robert E. Ramsay. Author of "Effective House Organs;" Lecturer on Direct Advertising, New York University; Formerly Editor of Advertising and Selling and Postage; Past President of Direct Mail Advertising Association, etc. xiii, 639 pp. D. Appleton and Company

Reviewed by Hugh E. Agnew*

For more than a quarter of a century men have been writing books on advertising. The most of them begin with a definition, proceed to show the economic status of advertising, then discuss market investigation, distribution methods, copy, illustrations and mediums. There were, of course, variations from this formula. But the occasional writer who did not attempt to cover the whole field in 300 pages, but chose some particular phase of advertising, handled the subject so inadequately that his book seems more like elaborated chapters from one of the general treatises, than a comprehensive discussion of the subject chosen.

The rehashing of the old material has continued unabated up to the present time; within the last two years at least three more general treatments of the subject have been brought out. In addition to these Roland Hall has presented his "Handbook of Advertising," [1] which will prove of permanent value, and should make the rewriting of the fundamental definitions and descriptions of material unnecessary for other writers.

A few other writers have confined themselves to some specific plans of advertising, and have treated it so fully and so authoritatively that their books are adequate for a foundational study. Other books may follow dealing with the same angle, but their value will lie in further amplification and the addition of newly developed processes. Frank Alvah Parson's "The Art Appeal in Display Advertising" [2] is one of these.

Two other valuable books comprehensively and authoritatively dealing with specific subjects have come from Robert E. Ramsay's typewriter. The first of these, "Effective House Organs," [3] *Administration* has reviewed. The second, "Effective Direct Advertising," is better than its predecessor. It is a valuable and fairly complete handbook for the man or woman engaged in direct advertising. Every phase of the subject has been given attention. The definitions and explanations of technical terms commonly applied to paper, printing, and engraving will be welcome to everyone who has occasion to refer to the book. The sources and care of lists, the handling of "returns," the mechanical preparation of the copy, illustrations and engraving are all given in detail. Much technical information which even the practitioner would find it difficult to carry in his memory is so arranged that it can be readily found. This includes postal rules and regulations, the different processes of addressing, the different methods of reproducing letters, and different devices for stimulating response.

It is a well-known fact among advertising men that one of the most serious defects of mail-order campaigns is the failure to keep adequate records. Without them an efficient follow-up is impossible. So the chapter on records will be particularly welcome. It is valuable, not merely for the methods it suggests, but for the way it sells the idea of keeping records. Many campaigns will be kept from going on the rocks if the suggestions in this chapter are heeded.

Part V of the book is devoted to special campaigns that show how to handle direct advertising in foreign trade, in reaching professional men, in developing business for banks, in supplementing salesmen's

* Member of the editorial staff of *Printers' Ink*, New York City.

[1] Reviewed in *Administration*, November 1921, by George B. Hotchkiss, Head of the Department of Advertising, New York University.

[2] Reviewed in *Administration*, January 1922, by L. B. Jones, Advertising Manager of the Eastman Kodak Company.

[3] See *Administration*, March 1921.

work and for a dozen other purposes that have proved difficult for more than one advertising man.

The book is replete with charts, graphs, diagrams, and a full replica of the different types of illustrations and engravings.

While there are some omissions, some minor errors, and some conclusions with which the reveiwer cannot agree, he humbly begs authors and publishers to give us more books like "Effective Direct Advertising"—books that deal adequately with specific phases of advertising. One on advertising campaigns is much needed. Another on co-operative advertising would be most welcome. These are but two of many subjects that await the treatment of practical and thorough men.

REVIEWS OF BUSINESS PAMPHLETS

Normal Burden Rates, Some Problems in Their Application. By Charles Van Zandt. The National Association of Cost Accountants, 130 West 42 Street, New York City.

While the subject of normal burden rates has been treated extensively in existing cost literature, Mr. Van Zandt's booklet treats the subject in as specific and clear a fashion as has been done. In the words of the author of this publication its objects are:

1. To establish normal rates and provide a means for their periodic revision.
2. To provide the works manager with a detailed statement showing what the burden ought to be in the absence of a system whereby departmental burden is budgeted.

To determine normal burden rates two factors must be known, namely, normal production and normal burden. Production is measured in numerous ways, depending upon the nature of the business. Several ways of gauging production are mentioned by the author. Among the most interesting features of the discussion are the author's definitions of theoretical capacity and practical capacity and his conception of what is normal production. His definitions of theoretical capacity and practical capacity are:

In non-technical language theoretical capacity may be stated as the number of units a machine can produce in a given time under ideal conditions or, in the case of hand labor, the number of units that can be turned out by the best workers.

Practical capacity, on the other hand, is commonly regarded as 85 per cent of theoretical capacity. This means that an arbitrary allowance of 15 per cent is made for single purpose equipment, spare machines for use in emergencies and, in the case of hand labor, for losses due to absenteeism, labor turnover, etc.

Normal production, he says, is some percentage of practical capacity and usually it is 70 to 80 per cent of practical capacity. He brings out one unsettled problem of cost accounting in the following fashion:

In setting up these departmental figures each department should be considered separately and without reference to the capacity of any other department. Some cost accountants advocate considering each department in its relation to the limiting department or the "neck of the bottle." In other words, if Department No. 3 has a capacity equal to twice that of Department No. 4, then normal production for the former would be only one-half what it would otherwise be. In this case all work passing through Department No. 3 would be charged with the cost of idle equipment in that department which could not be used because of the limitations imposed by Department No. 4. This method does not seem to be good cost accounting and there is the further disadvantage that the cost of the idle equipment in Department No. 3 does not appear as underabsorbed burden on the monthly burden statement of the department where the management will see it, but is buried in the costs.

He divides normal burden into these three classes:

1. Those which should fluctuate in direct ratio to the volume of production.
2. Those which should fluctuate partially with production.
3. Those that are fixed.

The grouping of these items will vary somewhat in different cases, but will probably be substantially the same as indicated.

He states that there may be some difference of opinion as to whether some of the items of labor and supplies should fluctuate directly with production but in general he believes they should do so. He treats another debatable point in the following language:

There will be more disagreement with the statement that current maintenance charges will always be 100 per cent of normal maintenance regardless of the volume of production. The writer's opinion is that when production is low advantage will be taken of the opportunity to make extensive repairs that have been postponed because of unwillingness to shut down equipment when there was work for it to do. That is exactly what happened in the case under discussion, and maintenance charges, generally speaking, have been as heavy as in normal times.

The actual technique of preparing burden statements is clearly brought out and supplemented with sample forms of burden statements containing figures. One interesting question which he raises, about which there is no unanimity of opinion, is the calculation of earned burden figures for each standing order code number which appears in the burden statement.

The Kansas Farmer is Making the Grade. By Nelson Antrim Crawford, Professor of Journalism, Kansas State Agricultural College. *The Post,* Kansas City, Missouri.

Business the country over is fundamentally dependent upon successful farming. *The Kansas City Post*, realizing the importance of the agricultural industry determined upon a series of articles that should present to its readers, rural and urban, the actual facts about agricultural conditions in a typically western state at this critical time.

To prepare the articles *The Post* secured Nelson Antrim Crawford, Head of the Journalism Department of the Kansas State Agricultural College. He made a 3000-mile journey through the agricultural sections of Kansas making accurate observations and impartially presenting different points of view. Recently the fourteen articles which he wrote have been reprinted in pamphlet form—"The Kansas Farmer is Making the Grade.".

In the first article of the series Professor Crawford states that:

Here in the United States and more particularly in the middle west, the farmer stands squarely in the middle of the stage with the spotlight turned on. The other actors in the play of American Industry have come to realize that the farmer is the main character.

The articles were prepared not merely to be of interest to agricultural people but for the business folk of the entire country. The problems of the farmer are in part the problems of the manufacturer, and those things affecting manufacture, affect all divisions of business.

Professor Crawford says:

The manufacturing folk, for instance, understand that if the farmer were kicked off the stage or resigned, something like 81 per cent of their actors would immediately lose their jobs. That is the proportion of raw products for manufacture furnished by the farmer.

To quote from the pamphlet, the writer says:

For the last year the farmer has felt he was playing a tragedy. He hated to give up his part. But he was sorely tempted many times to kick a hole in the bass drum in the orchestra and quit. He was not always sure that the rest of the people were more than casually interested in his performance.

But the people are interested. In congress, in trade and industrial conferences, in the stores and on the street, they have been asking questions about farming and the farmer. They discovered the importance of the farmer back in the war, and they realize that that importance has not disappeared because the nation is at peace. Nobody is any longer a passive auditor in the play in which the American farmer is the chief character. People are getting into the dialogue. In particular they are asking questions of the farmer. Such questions as these:

Can you come back, Brother Farmer?

Has the coming back process started yet?

What is your agricultural and financial situation?

What steps are you taking to better conditions?

What can we—the other citizens, the other factors in American industry—do to improve your situation?

These few questions and many others Professor Crawford asked the Kansas farmer in his trip over the state. Questions

asked not from an impertinent point of view, not out of pure unselfishness, but because it is realized that until the farmer comes back there is little hope for the rest of the business world. And the Kansas farmer has answered the questions with the same idea of public service.

One of the articles of particular interest is "How the Business Man can Help the Farmer in Making the Grade." Is there anything that the city can do for the farmer?

Says Mr. Crawford:

> Certainly there is one big thing. It can build up, in the middle west, the principal agricultural region of this country, industries dependent on agriculture. This is no program to be carried out in a day or a year, but it is a program that promises much for a long future.

The writer explains that apart from specific programs that the greatest service the city man can perform for the farmer is in being absolutely fair to him and in keeping constantly in mind the fact that the interests of the farmer are the interests of the business man. He will gain in this way most profit and the greatest advancement for his community and region.

This pamphlet may be obtained upon application to *The Kansas City Post*, Kansas City, Missouri.

Questionnaire on Personnel Activities in the Federal Reserve Banks and Their Branches. By the Committee on Personnel, Federal Reserve Banks, S. B. Cramer, Chairman, Cashier, Federal Reserve Bank of Chicago, Chicago, Ill.

One of the best pamphlets on the subject of personnel is to be found in this report prepared by the Committee on Personnel appointed at the Governors' Conference with the Federal Reserve Board, held at Washington, D. C.

The questionnaire is divided into nine groups for the purpose of classifying each major personnel function under a distinctive heading. These headings are: General, Employment, Remuneration, Training and Promotion, Health, Personal Service, Cooperative Activities, Incentives, Miscellaneous.

In its typographical make-up this pamphlet surpasses most publications of its kind in the business field. A number has been given to each of the nine headings and the pages have been cut in the margin so that these numbers appear on the page where the subject matter starts, somewhat after the manner in which the unabridged dictionary is indexed with pasted letters.

Obviously, the contents of this pamphlet are so technical that it will have little appeal except for those directly connected with financial houses. For its typographical make-up it is commended as a model.

Retail Inventory Shortages and Remedies. By the Committee on Inventory and Stock Shortages of the Controller's Group. Boston Chamber of Commerce, 177 Milk Street, Boston, Mass.

For more than a year a committee consisting of Henry W. Giese, R. H. Stearns Company; J. J. Bulger, Gilchrist Company; A. C. Enman, formerly with Meyer, Jonasson and Company; H. L. Foster, Houghton and Dutton Company; H. F. Kammeyer, C. F. Hovey Company; and M. M. Scott, Butler's Inc., have been working on the subject of the retailing inventory. The results of their labors are to be found in this pamphlet, which is without doubt a valuable contribution to the science of retailing.

Roughly speaking, the pamphlet is divided into seven parts in which shortages and remedies for the following departments are taken up and discussed: Order and Invoice Office; Receiving Section; Marking Room; Reserve Stock Section; Sales Department; Delivery or Shipping Section; Audit Department; Inventory Section.

To pass from the subject matter to the mode of treatment it may be said that the plan followed is one worthy of adoption by any retail trade board which publishes business pamphlets for its members. First the kind of shortage is listed in black-face type, then the remedy is given under a separate head. This in turn is, in most instances, followed by a paragraph or so of comment.

The pamphlet can be read with profit by anyone who is connected with an inventory department, whether of manufacture or of marketing.

CHRONICLE AND COMMENT

AN ENGLISH OPINION OF "ADMINISTRATION"

A nice thing, if it is nicely said, has added value. In the June number of *The Cocoa Works Staff Journal*, published by Messrs. Rowntree and Company, Ltd., of York, England, appears a detailed review of the articles appearing in the April and May numbers of *Administration*. The *Staff Journal* specifically deals "with the technique of factory management," but it departs far enough from this to bring in other matters of value to its readers. In introducing this review *The Journal* says:

> Among the large number of publications dealing with industrial administration which, "every day and by every way," reach us from the U. S. A., this magazine is pre-eminently the most useful. The dignity of its form is as attractive as the sobriety and practical good sense of its contents. Rising executives and functional specialists of all kinds who take their position and prospects in industry seriously cannot afford to pass it by. In the two excellent numbers received since our last issue many items are specially interesting.

SURETY BONDS IN BUSINESS

On page 276 of this issue of *Administration* appears an article "Surety Bonds in Business" by Edward C. Lunt, of The Fidelity & Casualty Company of New York. To those unversed in matters of the kind the article would seem to cover almost every possible variety of surety bond and cover it very fully. Mr. Lunt, however, is of a different mind, for commenting on his article he writes as follows:

> Too long already, this birds-eye view of suretyship in business nevertheless omits all mention of a few somewhat important classes of bonds and treats the included lines with regrettable lack of detail. Fortunately, however, surety men everywhere are keenly interested in their profession and are eager, even anxious to impart information to anyone who seeks it. If, therefore, any reader of this article desires additional light upon some particular kind of bond or some special phase of the bonding business, he can get it in fullest detail upon application to his favorite surety company.

WAS STERLING "PEGGED" DURING THE WAR?

Editor Administration:

Ever since the foreign exchanges suffered their drastic declines, one scheme after another has been brought forward for their stabilization. Most of these proposals have had one characteristic in common, namely, their impracticability. Those urging them have apparently not realized the basic nature of the problem they were attempting to solve. They have failed to recognize the fact that the abnormal state of the exchanges is but the symptom of a more deep-seated trouble, the extreme demoralization into which the world's industrial and political organization has been plunged by the war, and that the exchange situation will not be righted until these fundamental disorders are corrected.

For this rather general lack of understanding of what lies at the bottom of the exchange tangle, nothing has probably been more responsible than the very common but mistaken opinion that Great Britain succeeded in stabilizing the exchange value of the pound sterling during the entire period in which the attempt was made, that is, from about the beginning of 1916 to March, 1919. Even many who have a truer appreciation of the real nature of the exchange problem have fallen into the same error. Some of them talk as if artificial stabilization, as they call it, were still possible, although they are not disposed to favor it on the ground that it would only defer the ultimate restoration of sound, economic conditions. In view of all this it is hardly a matter for wonder that many people should think that what has been accomplished once can be accomplished again, and that they should, therefore come forward with suggestions for short-cut methods of unraveling the exchange snarl.

It is true that sterling exchange was stabilized, or "pegged," at about $4.76½ from early in 1916 until the United States withdrew its financial assistance to the Allied nations in March, 1919. But to

assert that this constituted actual stabilization is to confuse the relative with the absolute.

Until shortly after this country was involved in the war, the "pegging" was successful in every sense of the word. Sterling was tied to the dollar, and as dollar exchange remained normal, that is, at a parity with gold, the value of the British pound was stabilized not only with reference to the dollar but to the standard metal as well. It must, therefore, be admitted that until we joined in the struggle, the stabilization was complete and absolute.

It was quite otherwise, however, a few months after our entry into the conflict. With its declaration of war against Germany, the United States government placed this country's vast financial resources at the disposal of the Allied nations, advancing them credits to the extent of billions, so that they were no longer compelled to depend entirely on their own resources and on private credit facilities in this country. But the burden was more than even this country could carry without impairing its credit. The first indication of this was the rise of the neutral exchanges to their gold export points a few weeks after we espoused the cause of the Allies. A heavy outflow of gold ensued, and as it showed no signs of diminution, but on the contrary threatened our stock of gold with serious depletion, the government, in September, 1917, forbade the further exportation of the metal.

This action on the part of the United States authorities marked the end of the "pegging" of sterling exchange, using the term in the absolute sense of stabilization with reference to gold. The placing of the ban on gold exports was soon followed by an advance of the neutral exchanges in New York to an abnormal premium, and conversely by a decline of dollar exchange in neutral countries to an abnormal discount. For example, Spanish exchange went above 30 cents per peseta in New York, as against the par of 19.3 cents.

The dollar thus became greatly depreciated abroad. Its equivalence to gold was maintained at home, because the federal reserve banks did not cease redeeming their notes, and the government its greenbacks, in that metal. It had lost that equivalence, however, in the neutral countries. The prohibition of gold exports had destroyed the normal relationship between the domestic and the foreign gold value of the dollar, which, when the metal is permitted to move freely into and out of the country, cannot depart from each other by more than the comparatively slight cost and interest loss incurred in shipping the metal.

During the period in which dollar exchange was depreciated, sterling was still fixed at $\$4.76^{7}/_{16}$. The Morgan firm still bought cable transfers at that rate in whatever amounts they were offered. But the rate was merely "pegged" in relation to the dollar and no longer to gold. Sterling exchange was tied to the dollar, and therefore, depreciated *pari passu* with dollar exchange, as was shown by the decline of both rates in the neutral markets, whose currencies were on a parity with gold.

The fact of the matter is, however, that it was sterling and the other Allied exchanges which pulled dollar exchange down. By means of the "pegging" process carried on in New York, dollar exchange was bound fast to sterling and had to share the latter's vicissitudes. Proof of this is found in what took place after March, 1919, when the United States government ceased granting the Allied nations further credits and the British government was forced to let sterling in New York shift for itself. Once it was loosed from sterling, the dollar soon recovered its gold value abroad, while sterling, no longer partially buoyed up by the dollar, sank to even lower levels in the neutral markets. Its fall in New York to \$3.19 in February, 1920, only partly reflected this further depreciation. The decline was due for the most part to the appreciation of dollar exchange. The pound sterling continued downward, while the dollar turned upward, and the drop of the sterling rate in New York reflected this widening gap between their respective values.

It is plain from this summary of the action of the exchanges that the policy of stabilization was only a success in the earlier period of the war, when the world's

economic and financial machinery may be said to have still borne up under the strain of war conditions, severe as that strain was. The policy failed in the latter years of the conflict, when its demoralizing forces began to have full sway, and this notwithstanding the fact that the United States exerted its entire power in the attempt to make "pegging" effective.

The lesson from this experience with exchange stabilization, therefore, should not be lost. It shows the futility of attempting to regulate the exchanges in the present disordered state of the world's finances by any other method than the fundamental one of first bringing the world's economic and political conditions to something approximating the normal. In other words, stabilization of those conditions must precede the stabilization of the exchange.

THOMAS YORK

SOCIETY OF INDUSTRIAL ENGINEERS

Representatives from progressive manufacturing companies in all sections of the country will meet at the Hotel McAlpin, New York, October 18–20, to attend the three days' national convention of the Society of Industrial Engineers.

"Economics of Industry" will be the theme discussed by speakers of national reputation. Sectional meetings for Managing Executives, Production Managers, Sales Managers, Industrial Relations Directors, Accountants, and Educators are included in the program.

The international committee for the Elimination of Unnecessary Fatigue will hold an open meeting.

A special feature will be an exhibition of factory and office equipment and appliances designed to save labor and reduce fatigue. The exhibition will be held in the commodious Winter Garden adjoining the ballroom in which the principal meetings will be held.

All the meetings will be open to the public. The official program will be ready for distribution early this month (September). Copies may be obtained from the Society of Industrial Engineers' office, 327 S. La-Salle St., Chicago.

A PROBLEM IN COAL LAND VALUATION

A correspondent, the chief engineer of a West Virginia Coal Company, writes as follows:

Editor Administration:

There is one interesting question upon which we will need information sooner or later. This relates to the present value of 25,000 acres of coal lands containing 200,-000,000 tons of coal which is being mined at the rate of 1,500,000 tons yearly on a royalty of 10 per cent of the selling price, plus 1 cent. That is if coal sells for 90 cents, royalty is 10 cents—never lower, and if it sells for $250 royalty is 26 cents.

Have you, in any of your publications, the solution of such a problem?

* * *

This letter was referred to Mr. Thompson, General Auditor of the Colorado and Utah Coal Company, The Harris Coal Company, and the Colony Coal Company, who replies as follows:

Editor Administration:

Enclosed is a short discussion on the subject of Valuation of Bituminous Coal Lands.

I have tried to present the subject as a reply to Mr. Healy's letter, but, since I feel he has not told all in his letter, I think the references to further information which are made may be of more assistance to him than the discussion of the particular problem presented.

There is little information available on the subject and this article may do some good by starting a discussion among the readers of *Administration* which will bring out much new material.

W. J. THOMPSON

* * *

Mr. Thompson's solution is as follows:

VALUATION OF BITUMINOUS COAL LANDS

In *The Coal Review* of May 31, 1922 appears an article setting forth in part the report of the Cost Accounting Committee submitted at the convention of the Na-

tional Coal Association at Chicago, May 24 and 25, 1922, which in part, reads:

> . . . . the most vexatious problem—perhaps the only difficult problem—under the Income and Excess Profits Tax Law is the determining of values of property as a basis for depletion and depreciation if acquired prior to March 1, 1913, or if paid in for stock at any time.
>
> It is plain that the law and the basic principle of Article 206 contemplates that the taxpayer shall be permitted to introduce all reasonable evidence to prove such values. That is, it is the intent and meaning of the law that the valuation to be arrived at is one held to by a competent owner under no compulsion to sell, which valuation would be satisfactory to a competent purchaser able to buy.
>
> It is a very difficult matter to bring to bear collective influence upon the vital matter of securing just valuations, for the reason, of course, that each particular case is treated in inviolable secrecy by the department and each individual in his turn keeps this matter in his own affairs with equal privacy. However, it is of the utmost importance that the men in the coal industry should co-operate in the endeavor to get more exact and workable rules and principles applied in the valuation of coal mines. . . . something must soon be done in the effort to establish definite rules and standards for determining valuations.

There are no definite rules or standards for determining valuations and since the object of the correspondent's valuation is not stated and the information given in his problem is limited, it is hardly possible that a solution satisfactory to him can be presented. In lieu of *the* solution, it is possible to submit *a* solution with the assistance of a few assumptions and eliminations. We will assume the problem is:

What is the present value to a lessor owner of 25,000 acres of coal lands containing 200,000,000 tons of coal which will be mined and sold at an average annual rate of 1,500,000 tons, on a royalty of 10 per cent of the annual "mine run" basis sales realization per ton plus 1 cent, assuming the only cost to the lessor to be interest on his investment and eliminating surface land and mine property values.

The only basis for valuation given in this problem is the royalty value. Mr. George H. Ashley in his article "The Value of Coal Land"[1] says, "It has therefore been uniformly recognized that the royalty rate at which coal is paid for per ton at any chosen place is the truest measure of what it is there worth commercially in the ground."

All coal in the ground cannot be extracted and only that coal which will be mined and utilized has a commercial value. Royalties are paid not on coal in the ground but on coal production; therefore, they are a proper measure of value. In the absence of values based on sales the Natural Resources Division of the Internal Revenue Department favors royalties as a basis for coal valuations.

In this problem the future royalty returns must be determined by estimate. The royalty rate is assumed to be on sales realization per ton on a "mine run" production basis. By "mine run" basis is meant, per ton of coal produced without distinction as to the several grades or sizes into which the ton will be divided after screening and preparation for market. Price realizations differ as to grades and sizes. A ton of "mine run" coal, after preparation, may result in the following:

Kind	Size	Pounds	Per Cent	Selling Price Per Ton
Lump	8″ and up	600	30%	$6.00
Egg	3″ to 8″	400	20%	5.00
Nut	$1^1/_2$″ to 3″	360	18%	4.00
Slack	Below $1^1/_2$″	640	32%	2.00
Total		2000	100%	
Sales Realization Per Ton	Mine Run Basis			$4.16

[1] U. S. Geological Survey Bulletin 424, published 1910.

In general, the larger the size the higher the sales price. The higher the percentages of the larger sizes to the whole the greater will be the average sales realization per ton on a "mine run" basis. Conversely, increases in the smaller sizes will be reflected in a lower realization per ton "mine run" basis. If the coal sold is a combination of several sizes, the realization per ton may again differ.

In order to obtain a future normal average selling price per ton of production "mine run" basis, the selling prices of the past averaged over a period of years—the longer the better—should be determined. Full consideration should be given to the effect upon future size realizations by improved mining methods, variations in quality of coal in its effect upon both size realizations and price realizations, present and prospective sales contracts in their effect upon price realizations, competition, and all other factors which may warrant allowance for an increase or decrease in the average sales price of the past. Abnormal conditions of the past may warrant elimination of prices for some years. For the older mines the percentages of sizes realized from preparation may have reached a stage which represents with reasonable accuracy the future expectancy. The more youthful mines may show a tendency of gradual improvement. One way of illustrating the degree of improvement in sizes realized from preparation and its effect upon future sales realizations is as follows:

Assume a "mine run" production of 100 tons, apportioning sizes realized according to averages for the first and second halves of an experience period of years, and using the average sales prices for the first half of the period:

Production by Sizes Tons			Average Sales Prices	Sales Realizations Based on Prices 1st Half and Sizes		Mine Run Basis Increase	Per Cent of Improvement
Kind	First Half	Second Half	First Half	First Half	Second Half		
Lump.........	27	30	$5.00	$135.00	$150.00	......	.....
Egg...........	20	22	4.00	80.00	88.00	......	.....
Nut...........	15	18	3.00	45.00	54.00	......	.....
Slack.........	38	30	2.00	76.00	60.00	......	.....
Total	100	100		$336.00	$352.00	$16.00	4.76

Showing Effect of Improvement in Mine Run Basis Sales Realizations

	Actual Sales Realization Per Ton Mine Run Basis	Increase of Actual Realization for First Half of Period Account Improvement in Sizes Realized		Adjusted Realization for Future Guidance
		%	Amounts	
First Half of Period.........	$3.36	4.76	$.16	$3.52
Second Half of Period.......	3.50	....	....	3.50
Total..................	$6.86	....	....	$7.02
Average...............	$3.43	....	....	$3.51

In general it is safe to assume that so far as mining methods are concerned the size realizations from preparation in the future will be as favorable, if not actually better, than those of the past.

The price of \$3.51 is an adjustment of the actual average sales price of the past only in respect to sizes realized, other adjustments may be necessary due to changes in other elements which affect average prices.

Without any actual data it may be assumed that after consideration of abnormal conditions the average selling price on a "mine run" basis for the past 18 years is adjusted to allow for factors which will affect future prices and is determined to be \$2.40 per ton. This price will be used as the normal average annual "mine run" price realization for future years. The royalty rate in the problem being 10 per cent of selling price plus 1 cent, the rate is 25 cents per ton.

The next factor to decide is the life of the mine. From the figures of 200,000,000 tons for content and annual production of 1,500,000 it appears the life of the mine will be 133⅓ years. Granting the correctness of content and production rate there is something more to be considered than merely dividing the former by the latter. It is to be determined what this coal is worth today as an income-earning investment and we cannot go farther into the future than the investment value will extend. In "Income Tax Procedure—1922," page 1231, Robert H. Montgomery says in his chapter on "Depletion":

> A copper or anthracite mine might have an estimated life of 100 years, but no sane purchaser would tie up any of his capital for 100 years. . . . Engineers who have given much thought to this subject suggest that the maximum be 45 years.

The writer knows of an Income Tax valuation case which was settled by the Natural Resources Division of the Internal Revenue Department using 40 years as the operating life of the mine. The Minerals Section of the Department of the Interior considers a lessee entitled to 50 years to work out a large deposit of coal under the present leasing act. Any value beyond 50 years is certainly speculative, but if it can be shown, of course, it should be considered for valuation purposes even though value and estimated content might be omitted for depletion purposes. What would be a fair life in one case may not be fair in another but for the purpose of this solution a fair life will be considered as 45 years.

The authorities differ in their recommendations for a fair rate of interest. They offer a variety of rates ranging from 5 to 15 per cent. A decision should be based on the expectations of those actually putting their money in this class of investment. Whether as operating owner, lessee, or lessor, any investor in coal lands who makes an investment upon the expectancy of an actual dividend paying return, over and above return of capital, of less than 8 per cent, represents the exception rather than the rule. All coal land investments do not actually pay as much as 8 per cent, but a fair rate is not one based on sad experiences. It is what a purchaser reasonably expects when he is considering buying, not what he gets that should decide because he may not get all that is justified by the actual value. With his risk somewhat lessened it is probable that a lessor would not expect as high a return as a lessee. In general, for a lessor 8 per cent expresses a fair rate and for a lessee it may be placed as high as 10 per cent.

The annual production being 1,500,000 tons and royalty rate 25 cents, the annual return for a period of 45 years is \$375,000 and out of the returns the owner will receive return of his original investment plus 8 per cent interest on the capital remaining in his investment each year. He is selling his coal on the installment plan receiving annual payments therefor during a period of 45 years and getting 8 per cent on deferred payments. The value of the coal to him today, then, is the present worth of an annuity of \$375,000 for 45 years at 8 per cent or \$4,540,593.75.

The present value method used by the Treasury Department engineers in valuation of mines where prospective earnings are discounted to present value is more complicated. Their method contemplates annual dividends equal to a fair annual interest return on the original investment plus an amount, which set aside each year

and securely invested at 4 per cent compound interest will, at date of exhaustion, equal the original investment. Their method results in a lower valuation than that obtained by the straight annuity method because the sinking fund requirement causes an increase of interest on the original investment. According to their table the present value of each dollar of operating profit (in this case royalties) accumulated during a life of 45 years, with interest at 8 per cent and sinking fund at 4 per cent is $.251774. The accumulated royalties throughout the life of the mine in the problem is $16,875,000 ($375,000 for 45 years). By this method the present value of the mine would be $4,248,686.25 ($16,875,000 multiplied by $.251774) or $291,907.50 less than the valuation shown by the straight annuity method.

For opinions of authorities regarding the sinking fund provision and a good general discussion on the subject of "Valuation of Mines," reference is made to Robert H. Montgomery's "Income Tax Procedure—1922."

The Treasury Department uses the method of present value of anticipated earnings for very few mines. It is evidently used only as a last resort. This unpopularity seems an admission of weakness but probably not so much as to the method as in respect to the extreme uncertainty regarding the accuracy of future earnings based on a mass of present estimates. Also capitalized earnings is not of itself an accurate expression of value as between willing and well-informed buyers and sellers, and it is the latter value for which the Treasury is seeking. Aside from the theoretical discussion the method is not beyond reason as a practical guide for valuing anticipated earnings especially in view of the many estimates and uncertainties involved, but this is not true in respect to valuation of royalties. In the case of royalties, the uncertainties are reduced to a minimum and the determination may be considered not an attempt to value earnings but rather to determine present value of future installment payments to be made according to the terms of sale. In the problem above the lessor is selling his coal for 45 annual payments of $375,000 each, and he expects 8 per cent interest on deferred payments. A sinking fund provision would merely upset the facts and change the interest rate. The straight annuity method is the proper means of solution because it is in accord with the facts.

STATESMANSHIP IN BUSINESS

In his "Comment on the Times" in the August *Century*, Glenn Frank discourses very interestingly on the testamentary dispositions he would not make of an estate of $5,000,000. Speaking of the opportunity for public service in private business he says:

> First, taken by and large, the rich man's greatest opportunity for public service lies inside his private business. That is to say, statesmanship in business is of greater social value than philanthropy outside business. I have often thought of the case of Carnegie. Mr. Carnegie, when he reached the zenith of his industrial and financial power, sold out and spent the rest of his life in so-called "public work." He endowed libraries, built peace palaces, and enjoyed a widespread reputation as a distinguished servant of the common good. I wish Mr. Carnegie had possessed the requisite imagination and statesmanship to see that in his steel industry he possessed a remarkable social laboratory under his immediate control—a laboratory in which he might have helped the nation to experiment its way toward some solution of the vexed problem of industrial relations. I cannot but feel that had he spent his energy and his money in this fashion there would now stand to his credit something far more satisfying than the cobwebs that have been spun across the entrance to his peace palace at The Hague. In other words, Mr. Carnegie had the opportunity to be a statesman in business; he chose to be a philanthropist outside business.

INVENTORIES AND THEIR VALUATION FOR INCOME TAX PURPOSES

Editor Administration:

I have read with much interest an article by Mr. L. C. Haugh, entitled "Inventories and Their Valuation for Income Tax Purposes," which appeared in the June issue of the *Administration* magazine.

I note, therefrom, that Mr. Haugh has failed to state the most important decision

of the Income Tax Unit in respect to the valuation of inventories for income tax purposes. In view of the fact that there are many business men who have not the time nor the inclination to study the various rulings of the Income Tax Unit relative to the valuation of inventories, and who might accept Mr. Haugh's article as being authentic because of his former connection with the Income Tax Unit, I wish to state the ruling I mentioned and the importance thereof.

Mr. Haugh says that "Cost, when used as a basis for pricing inventories, means the actual net invoice price paid for the articles." Article 1583, of Regulations 62, relating to the Revenue Act of 1921 (and which has been made applicable to the Revenue Act of 1918 by a recent Treasury Decision) provides that Cost means:

1. In the case of merchandise on hand at the beginning of the taxable year the *inventory price* of such goods.

2. In the case of merchandise purchased since the beginning of the taxable year the invoice price less trade . . . . discounts . . . .

The importance of the foregoing official ruling may be readily understood by the following hypothetical case:

Assume that a company had on hand, as at December 31, 1920, 1,000,000 pounds of a certain article which had cost 40 cents per pound, but which had a market value as of that date of only 30 cents per pound. Assume also that, as at December 31, 1921, that company had on hand (in addition to the 1,000,000 pounds), 500,000 pounds of that article which had been purchased during the year at a cost of 38 cents, but which had a market value as at December 31, 1921, of only 36 cents.

According to Mr. Haugh the 1,500,000 pounds of material on hand at December 31, 1921, would be priced at 36 cents per pound (assuming that the company had adopted the basis of cost or market, whichever was lower, for pricing its inventory), which would produce a total inventory value of $540,000.

If the inventory were priced in accordance with said Article 1583 (upon the basis of cost or market, whichever was lower), 1,000,000 pounds would be priced at 30 cents per pound, and 500,000 pounds would be priced at 36 cents per pound. This would produce a total inventory value of $480,000, or a decrease of $60,000 from the total inventory value under the theory of Mr. Haugh.

It is obvious, therefore, that, if the inventory were valued under the theory of Mr. Haugh, the company would report, as income subject to tax, an amount of $60,000 in excess of the correct amount that should be reported.

Yours very truly,

Douglas I. Mann.

Editor Administration:

Replying to the letter of Mr. Mann, I wish to thank you for this opportunity to make clear a point that may confuse some of your readers and cause them some difficulty with the Bureau of Internal Revenue.

To begin with, my article was prepared long before the publication of Regulation No. 62, relating to the Revenue Act of 1921, which are retroactive through Treasury Decision No. 3296, and, therefore, applicable to the Act of 1918.

However, this does not alter the authenticity of the subject matter contained in "Inventories and their Valuation for Income Tax Purposes," nor will a taxpayer derive any such benefit as Mr. Mann seeks to read into the regulations.

The following paragraph is quoted from a recent letter of the Income Tax Unit—"Relative to the first paragraph of Article 1583, Regulations No. 62, you are advised that this paragraph has reference to an inventory valued on the basis of *Cost* and not on the basis of Cost or Market whichever is lower." From this it will immediately be seen that in the hypothetical outline of Mr. Mann, the regulations will not permit of valuing the one million (1,000,000) pounds at 30 cents per pound on December 31, 1921. The total quantity (1,500,000 pounds) must be valued at 36 cents per pound, as this market value on December 31, 1921 is lower than either the 40 cent cost in 1920 or the 38 cent cost in 1921.

The mistake made by Mr. Mann lies in the fact that he has confused the two methods of valuation laid down by the Bureau of Internal Revenue. Cost can

mean but one thing when used in either of the two methods—"the amount or equivalent paid, given, or charged for anything bought" and, under no condition, can it be a "market value" carried over from a preceding year. Cost is, in the last analysis, pain inflicted, just as utility is pleasure conferred.

The application of Paragraph 1, Article 1583, can be used to advantage only when pricing an inventory on the *straight cost basis*. An article that cost 40 cents in 1920 and carried over to 1921 inventory may be valued at 40 cents, regardless of the fact that the taxpayer paid higher prices for the same article in 1921, or that its market value was greater than 40 cents as at December 31, 1921.

I shall be glad to answer any other questions, if possible, on this subject, through your valued column.

L. C. Haugh.

SCIENTIFIC SALESMANSHIP IN AMERICA AS VIEWED BY AN ENGLISHMAN

In the June number of *The Cocoa Works Staff Journal*, referred to earlier in Chronicle and Comment, appears the following quotation from an address delivered by B. S. Rowntree at a Conference held at Oxford on April 6–10, 1922. Mr. Rowntree's recent visit to America will be pleasantly remembered by those who met him and heard him lecture while here:

I think the American has made salesmanship into a high art. It is not with him a case of getting hold of a commercial traveler, giving him a bag of samples, and saying, "There is your district—do your best." The thing has really become a science. It is not unusual, though by no means general, to divide salesmanship into two parts—planning and execution, under different functional heads. The duties of the sales planning department would be to survey the whole field, and to get in touch with all possible "prospects," as they are called, *i.e.*, all the potential customers.

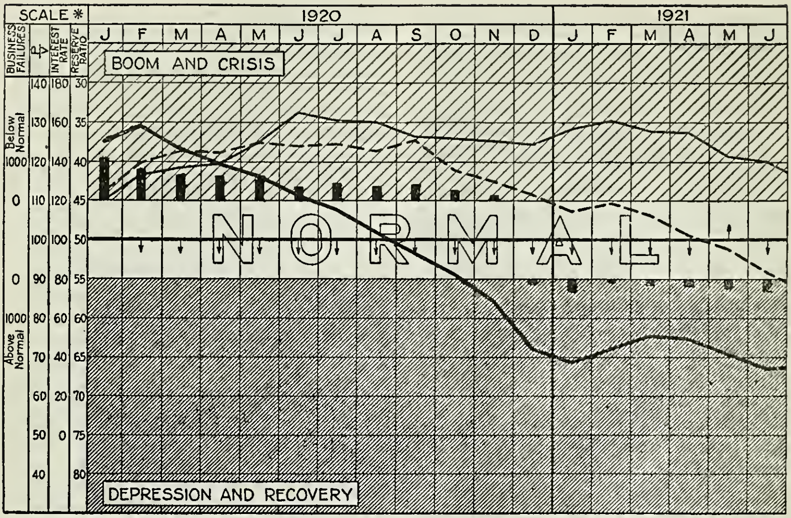
Let us take, for instance, a firm I visited which makes a mechanical specialty. They have the whole of America mapped out into areas, and they have made the most elaborate investigations into the possible number of "prospects" in each area. They ascertain the number of banks, and estimate that for so many hundred banks they ought to be able to sell so many of their machines. They do the same for shops, warehouses, factories, and so forth. The most elaborate investigation is made as to the possible number of machines which can be sold in each area. In the large towns they make their calculation for every block of offices. That is one duty of their Planning Department—to find out the possibility of sales. Another is to find out exactly what people want, what their competitors are offering them, and the prices at which machines should be supplied. Having found out all this, they turn to the Manufacturing Planning Department and say, "We want you to turn out, during this next year, so many machines of such a kind, at such a price. Can you do it?" The answer may be, "No, we cannot do it, as certain modifications in our present machine for which you are now asking will be very costly. If you will allow a slight alteration, we can supply something cheaper." They discuss this, and if they decide upon the alteration it is made, and a slightly modified machine is put on the market. They then make out their program—so many machines to be sold in January, February, March, April, and so on to the end of the year. The number to be sold in each area is also stated. When this program is completed they turn to the executive side of the Sales Department and say, "That is what you have got to sell." They even make time studies on their travelers—how much time is spent in the railway train, how much time with customers, how much in walking or driving, or waiting for customers. Having got this time study, they set to work to see how much waste time can be cut out. How can they re-plan this man's ground so that he has more time to spend on the actual sales? Such scientific salesmanship accomplishes wonderful results.

* * *

The notice of the Oxford conference at which Mr. Rowntree spoke, as given in *The Cocoal Works Staff Journal*, is interesting and indicative of the importance given to such conferences in England. It reads as follows:

A most interesting and stimulating Conference was held at Oxford from April 6th to April 10th. . . .

The men were accommodated in Balliol College and the women in Somerville. As usual, the Master of Balliol, Mr. A. L. Smith, extended a special welcome to those who were attending the Conference. The Master has but lately recovered from a very serious illness. This fact gave a special weight to his concluding address.



***Note on Scale:* Failures—Number above or below normal; $\frac{P}{V}$ Line—Index number, 100 equals 1912 rate;

THE BUSINESS TREND—A BAROM

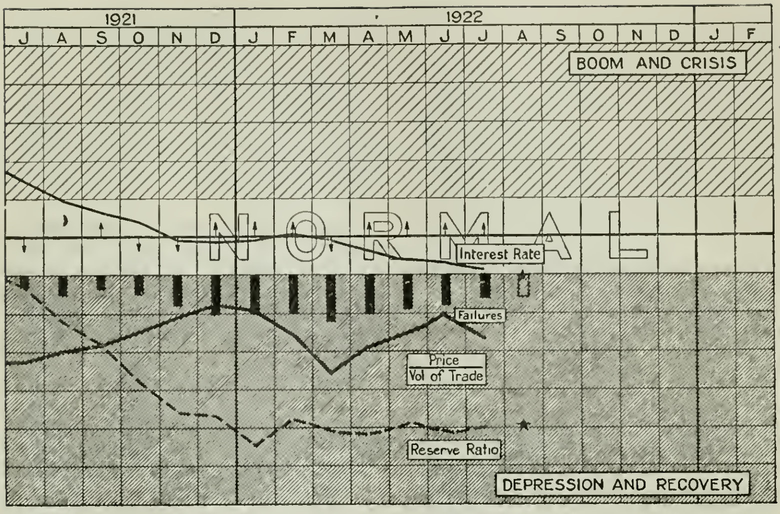
Prepared by Lewis H. Haney,

EXPLANATION OF BAROMETER.—The trade barometer shown above is so constructed that when business is in the stage either of boom and expansion or is moving downward in the early stages of crisis, the curves and vertical bars are in the upper area. When the general business condition is that of depression or the beginning of recovery, the curves and bars are in the lower area.

The light line shows the course of the interest rate on prime commercial paper, with adjustment for normal seasonal variation. It is based on an index number, 100 equaling 5 per cent. The dotted line shows the federal reserve bank ratio of cash reserves to note and deposit liabilities, *the curve being inverted* so that an increase in the ratio causes a fall in the curve. The heavy line shows the relation between the price level (Bradstreet's index number of wholesale prices) and the physical volume of trade (car-loadings × tons per car). The bars projecting above or below the normal zone indicate the movement of business failures (Dun's). Bars projecting above the "normal" area, show a smaller number of failures than normal; bars projecting below show an excess of failures over normal; the absence of any bar would show that failures are normal. The arrows pointing up or down from the center line of the normal zone show by their direction the course of a special six-commodity price index. The stars indicate the probable trend of the curves during the current month; the dotted bar the probable trend of failures.

THE BUSINESS TREND IN AUGUST

The general conclusion one must draw from an examination of the barometer is that there is yet no sharp recovery from the depression which has prevailed since the middle of 1921. Furthermore, while the way is prepared for recovery in so far as fundamentals are concerned, the upward movement has been postponed as a result of serious labor disturbances and foreign conditions.



Interest Rate—Index number, 100 is based on 5 per cent; Reserve ratio—Actual figure, scale inverted.

ETER OF INDUSTRY AND TRADE

Director, New York University Bureau of Business Research

An analysis of the several factors contained in the barometer follows:

1. The trend of wholesale prices still appears to be upward. Each one of the special group of six commodities selected in the preparation of the barometer showed an increased July price average over the average for June. The more extensive lists of commodities used by Bradstreet's and Dun's in their price index numbers, show a slight decrease as of August 1. But it is to be noted that these index numbers make no allowance for seasonal variation in the price of agricultural products such as corn and wheat, and it is probable that if they had done so, their index numbers would have shown a small increase.

Undoubtedly, however, the price trend is now somewhat more mixed, and two of the six commodities chosen for the barometer were lower at the end of July than at the beginning.

There is no doubt but that many prices are "out of line" and that much readjustment remains. Taking Bradstreet's figures as a basis, it will be found that the prices of the following groups of commodities are disproportionately high—coal, naval stores, building materials, chemicals and drugs. On the other hand, the following groups are disproportionately low—metals, hides and leather, live stock, bread stuffs. In these cases it is probable that readjustments will occur which will tend to offset one another, with but little change in the general price level. One thing is certain, there is maladjustment of industry expressed in the high prices of coal, oils, and textiles, and in the low prices of bread stuffs and provisions; and normal conditions can hardly be restored until there is a reduction in the one group and an advance in the other.

2. The interest-rate curve shows a decided decrease for July and no immediate change is in sight. As this decline makes allowance for seasonal variation, it is apparent that there has as yet been no material increase in the demand for funds in business, and, consequently, it cannot be said that industrial recovery has gained much headway. Signs, however, are at hand that there is a broadening demand for commercial paper

at the present low rates, which may well indicate that the turn of the tide in this regard is near.

3. The reserve ratio curve showed a small rise in July, but not one to which much importance can be attached. Apparently the most that can be said is that the reserve ratio is still fluctuating at a level which is far above normal, thus indicating a continued condition of business stagnation and easy funds for speculation.

The existence of unsettled conditions is apparent with regard to the reserve ratio. The chief factor in recent fluctuations has been a lower amount of discounts at the banks which indicates a low stage of business activity.

On the other hand, this condition means abundant funds for speculative purposes and promises, in so far as such abundance is a controlling factor, that there will be no considerable check upon the stock market in the near future.

4. One of the most promising factors in the situation continues to be the failure statistics. The number of business failures in July was so small that when allowance is made for the normal figure for that month, the excess is considerably reduced below the general excess. Accordingly, the failure bars continue to approach the normal. It is to be noted that for four successive months there has now been a steady approach of failures to the normal level.

5. The PV line indicates a setback to business resulting from recent disturbed conditions. Price movements have become more mixed while at the same time the increase in physical volume of trade has somewhat outrun the consuming demands. It is most unfortunate that at a time when physical volume of production and trade was so rapidly swelling, there should have been the serious setbacks to exchange and consumption which have been caused by labor strikes and unsettled foreign demand. On the other hand, it must be admitted that production has been too rapid in some lines.

As to the future, much depends upon the rapidity with which various readjustments are made. The fact that the interest rate curve and the PV line have not yet definitely turned upward and the uncertainty with reference to the price movement at present, indicate postponement of recovery. It is to be emphasized, however, that financial and market conditions are sound and that they are in a position to support a fairly rapid industrial improvement. When the railway and coal strikes are ended, that improvement should begin in earnest.

On the whole, the foreign situation appears to be somewhat improved. June exports showed decided increase and there has been an increase in the general level of exchange rates with the chief countries with which we trade which holds out promise of continued increase in foreign business.

ADMINISTRATION

The Journal of Business Analysis and Control

OCTOBER, 1922

THE VIEWPOINT OF THE EMPLOYEE

BY ERNEST T. TRIGG *

THE training of its recruits is one of the most important problems facing the modern business. No company can be bigger than the men who constitute the organization back of it; and no organization can long remain effective that lacks the impetus of new blood. In a major sense, the growth and prosperity of our entire business structure is dependent upon the solution that we find to the recruit problem. It is a problem which at no time may safely be put aside or neglected.

Especially, it seems to me, is this true at the present time. More and more during recent years the responsibility for the efficient training of new employees has been shouldered upon the employer, and this in spite of the vastly superior facilities for the education of our youth that we have available as compared with a generation ago. The very system that we have devised for the advancement of our young men to an extent has reacted against them, at least in so far as their general viewpoint toward business is concerned.

A young man in the employ of a small company up the street comes to me today for a position. He tells me:

"Your company is a leader in its field. It is bigger, better known, and more progressive than the concern I am with now. I want to be with you because you offer me greater possibilities to get ahead. I know I will make good, even though my experience has been rather limited."

"How much salary are you getting?" I inquire.

"Well," he hesitates, "I'm only being paid $25 a week where I am now, but should I take a job with you I think I ought to get $30. I wouldn't like to make the change unless I bettered myself in so doing."

In a word, we are offered the privilege of hiring an unknown, untried man at a salary greater than his present employer, who knows him, considers him to be worth. Professedly he desires to enter our employ because therein he sees greater opportunities for himself. Yet, we, the employers, must assume all the risk and the applicant cares to assume none.

And this same viewpoint manifests itself in devious ways. Not long ago one of our young men committed an act of disloyalty to the company. I had no means of knowing the reason for the act. If it was intentional it demon-

* Vice-President and General Manager, John Lucas and Company, Inc.

strated that the man's heart was not right toward us; if unintentional, that his judgment was not good. I spoke to him about it in a friendly way and tried to make plain, for his own good and ours, how important we considered the absolute loyalty of our employees.

"Since you think I have been disloyal," he flared, "why don't you fire me? If I were you, I wouldn't keep a man around me whom I thought had been disloyal."

There it was, that attitude which implies that a favor is being conferred upon the company by remaining in its employ. Others reflect the same thing under rebuke through threats to quit on the spot and go over to a competitor. Not all men are so shortsighted, of course, but enough of them are to create a condition that is steadily growing worse. And strangely the brightest very often are the sorriest victims of their own lack of vision, the hardest to handle; which explains why many employers, especially those of the school-of-experience type, hesitate to employ men fresh out of our big universities.

II

I am not one of those who despair of our present-day young men, but as one who is charged with the duty of employing and training a certain number of them in a business enterprise I cannot afford to ignore the inflated mistaken self-pride that is detrimental to the early progress of so many of them. They get over it in time when they are made of the right stuff, but until they do get over it they are liabilities and not assets to an organization that demands and expects teamwork in its ranks.

Take the case of the young employee who literally challenged me to discharge him because I pointed out to him an act of his that had proved detrimental to the company. He was inexperienced, little better than a novice, but competent and with signs of future promise. Eventually, under a different attitude, he might have made a valuable employee and with such potentialities I did not care to lose him. I considered his case seriously for several days. Finally I called him into the office and told him that the only course open to me was to let him go. He had flung out a blunt challenge; to ignore it would have only served to confirm the man's belief that he had conducted himself as a "real man" should when called to account for a blunder.

Just one more instance of this general type before I go ahead with my story:

A young fellow, whom I will call Smith, had been with us for several years, during which he had progressed rapidly. He had gained several promotions until he was next in line for a rather important minor executive post, which meant a considerable increase in salary. But he was not ready for this next promotion; he lacked the foundation of experience, or "seasoning." He began to chafe at the delay, and at last came to me in open complaint.

"The Jones Company," he stated, "has offered me the same job in their organization. I would prefer to stay here, but I must consider myself as well as the company. Unless you can see your way to—"

"Smith," I said, "the best thing for you to do is to take that job with the Jones Company. I might persuade you to stay and wait a while longer for the same promotion with us, but if you stay under the circumstances you never will be completely satisfied that you did the right thing. Go to Jones, but remember this: We'll be glad to see you back with us whenever you care to come."

Smith went to the rival concern and did fairly well for a time. Then he slumped badly. Questions and prob-

lems that taxed him to the utmost came up, and because he lacked seasoning he floundered into water too deep for him. Three years from the day he left us he came back.

"Mr. Trigg," he admitted frankly, "I made a mistake. I wasn't ready for that job, and I'd be glad to start over again in my old position here."

His viewpoint had changed, but it took three years of sad experience to change it. We didn't give him back his old job, but we did put him into the executive post for which he had been waiting when he quit. And he made good in a big way. The mistakes that he had made with the Jones Company were to his own and to our profit, because he knew enough not to make them again.

III

Every employer of men can cite instance after instance of the kind I have mentioned; and most employers can look back 20 or 30 years and conclude, with some perplexity as to the reason, that a vital difference exists between the average young man entering business today and the young man of a generation ago. The difference is not always so marked, but in some degree it is usually there. I vividly recall the elation with which I obtained my first job with a company that offered me a real future. I felt that I was privileged to work for that company at any wage, and that my employer was exceptionally generous in giving me, a novice, the opportunity that he did to get a foothold in life. It meant something to me to "get a start," and most of the young men I knew felt likewise. We were beginners, keenly aware of our deficiencies. As we saw it, the responsibility of fitting ourselves into that business was ours not our employer's.

I do not mean to imply that the beginner of today is less ambitious, less industrious, or less well equipped for business than was the average beginner of 25 years ago. From a purely educational standpoint he is better equipped as a rule, and this is as it should be. In the old days only the rich men's sons went to college; the chances were that a young man was fortunate if he had had a high school education; today he is an exception if he has not been graduated by a high school, and often as not he is a college man. It is the viewpoint principally that has changed, the attitude of the recruit toward the responsibility involved in the getting or in the giving of jobs to untried applicants.

IV

The young man may argue that it is proper that his viewpoint should have changed. If he is a college graduate he has made a certain investment toward the improvement of himself. Surely, then, he reasons, his services are of some definite and specific value to the business.

Perhaps they are. Perhaps they are not. Business worth is something that cannot be calculated upon a college diploma and letters of recommendation. Even an experienced man who has been an outstanding success in one business may be a pitiful failure in another engaged in an identical line. Man value to any company, the dollar value expressed on the weekly pay-roll, can be determined only by performance within that company. The employer gambles every time he takes on a new employee, regardless of what the new employee's qualifications may seem to be. But as sure as Monday follows Sunday, the man's value will out and be paid for in due course if it is there. Ten-thousand dollar men do not remain long in five-thousand dollar jobs, nor do five-thousand dollar men waste their talents long at twenty-five hundred.

Real worth establishes itself conclusively only at the desk and at the bench, and not in the employment office.

"Oh, certainly," the applicant will declare boredly, "that is a truism. I know it as well as you do. I want to show you what I'm worth."

The very fact that an applicant for a position who volunteers to start work for nothing and let the employer himself determine his value is such an oddity as to be almost non-existent today, is singular proof of the applicant's lack of complete confidence in his own capabilities or in the employer's fairness. I am wariest of the man who holds out longest and talks loudest on "how-much-am-I-going-to-get" lines.

But be this as it may I am merely trying to make clear, from the employer's view, the fact that such a condition does exist, will exist, and must be considered if the training methods of a modern business are to produce results. The business executive who employs is compelled to take men as they are and mould them to his need. He will fail of his purpose if he fails to take into account the men's own viewpoint, and neglects to provide sensibly for the changing of it. The day is past when a new man could be shunted into an organization and left to fit himself into it at his own initiative. To get the most out of a beginner, a definite plan of developing him is highly desirable; and it is such a plan that our company has endeavored to perfect for the training of young salesmen—a subject which the Editor of *Administration* has asked me to describe in a subsequent article.

(Mr. Trigg's article describing the training of salesmen in John Lucas and Company, Inc. will appear in the December number of Administration.)

THE TRAINING OF "INSTITUTIONAL" SALESMEN

BY HENRY C. LINK*

I—INSTITUTIONAL SELLING

WHEN the great industrial period between 1850 and 1914 is recorded in its proper perspective, the Tale of the Road or the Story of the Salesman will undoubtedly be one of its most romantic and most characteristic episodes. What the troubadour did to spread the famous exploits of his day the traveling salesman has done to spread a knowledge of the wonderful products of modern industry. But as the events which the troubadour described were colored by his personality so the reports of a company's products were colored by the personality of the salesmen who described them. Companies in the past were dependent, as are many even today, upon the individualities of their salesmen who were their *ambassadors* to the trade. The manufacturer's chief object of worship was that mysterious force called the *knack of selling*, and the salesmen who possessed this knack were the dominating figures. Their word as to what could and could not be sold was law. Their expense accounts were seldom questioned. They were wined and dined at elaborate banquets prepared annually or semiannually for their especial entertainment. Their company training consisted almost entirely of these brief periodic affairs, and of the unblinking compliments which the officials of their companies heaped upon their heads. The dominant purpose of these occasions seemed to be relaxation for the returned conquerors rather than education; artificial stimulation by which to spur them on to new fields of conquest rather than constructive, systematic development.

The harmful results of this method of selling were many and are so well known that they need hardly be enumerated. They were the results inevitable to *virtuosa* or *star* worship in any field. Salesmen frequently became arrogant and unreliable. Their territories and customers were often mishandled. They burdened the home organization with an unnecessary load of traveling expenses. Their preponderant influence in shaping the policies and products of their company was often disastrous. Above all, they were likely to give their company, no matter how consistent its policies or uniform the quality of its product, a *spotty* reputation, the character of the spots being determined by the character of the salesmen in particular territories. To the extent that the individual salesman and the knack of selling were considered supreme, to just this extent was a company likely to suffer at the hands of its sales representatives.

II

Institutional Selling. Today, however, a new type of salesmanship has come into being. We call it *institutional selling*. The word institution as applied to business enterprises has already obtained a considerable vogue. However, it is used more frequently than appropriately. One of its most common misuses is as a sentimental designation of the dignity acquired by a company through mere size or through

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some lofty conception of its own importance. The term "institution," as used here, is intended to designate only a business enterprise of distinctive characteristics, particularly characteristics which manifest themselves to the buying public through a company's methods of marketing and the quality of its product or service. Considerable emphasis is placed, by those who discuss institutionalism in business, upon the institutional *spirit*. After all, the measure of the spirit is its works. There are companies which look upon themselves as institutions which, in the eyes of the buying public, are not institutions at all, simply because they lack the necessary degree of distinction in their marketing methods, their products, their services, or their policies.

Our conception of institutionalism in business is obviously an economic one, arising out of the modern developments in the technique of production and distribution, and since all our conclusions about the training of salesmen hinge upon this conception, it is necessary to develop its meaning in concrete detail. Instead of doing this through a historical account of the growth of institutionalism in business, we shall briefly enumerate and discuss characteristic types of institutions, beginning with those which are simplest and ending with those which present the most complicated problems. Thus we shall also lead from the training of salesmen in its simpler forms to the more involved types of salesmen training.

III

The Chain Store Type of Institution. Probably the most obvious type of institution in the business world today is represented by a number of the chain store systems. Almost every individual recognizes a Liggett drug store when he sees it, knows that he may expect to obtain there certain standard articles at prices which compare well with prices anywhere else, knows just where to obtain these articles and the approximate quality of the service which will accompany each transaction. These characteristics are all part of a carefully laid out plan, and the institutional character of the Liggett system has been deliberately created by means of such details. In stores of this type, the training of retail salespeople is an important problem, but one which is simplified by the definite institutional characteristics of each store. A still more important problem is the training of store or sales managers who will be able to carry out intelligently the carefully planned institutional details. For this purpose the Liggett Stores, the Atlantic and Pacific Tea Company, The Piggly-Wiggly Corporation, and others, conduct training stores which are models in arrangement and operation, and in which the most approved sales methods have been tried out and standardized. In addition, there are traveling instructors who check up the operations of all stores and coach local managers in the latest developments of the company's merchandising plans.

A company which illustrates the principles of institutionalism in business and their effects upon salesmanship in a unique way is the Larkin Company. Some twenty years ago this company, at that time manufacturing soaps almost exclusively, inaugurated a plan of marketing its products so original and so practical that in a few years the company became a household word throughout the country. The "Larkin Idea" of selling soaps and associated articles on the premium plan is still so well known that no detailed description is necessary. Its methods, its catalogues and

literature, were so clear cut and distinctive that the name "Larkin" called up immediately a vivid and definite picture. Most remarkable of all, any person could appoint him or herself a Larkin salesman, and probably ninety-five per cent of the Larkin products were at one time sold through women's clubs and by children. How could an enormous company risk its reputation in the hands of thousands of promiscuous, self-appointed, untrained salespeople? Simply because the business methods which made it an institution were so beautifully worked out that its amateur sales representatives automatically carried them to completion and thereby still further established the institutional character of the Larkin Company.

These examples illustrate definitely even if not comprehensively the elements which, singly or in their entirety, must be present in any business enterprise which aspires to the distinction of being an institution. To enumerate, they are:

1. A product or service of known quality and, preferably of known price.
2. A distinctive method of marketing.
3. A distinctive sales literature, i.e., trademark, advertising, catalogues, etc.
4. A stable and consistent policy covering every contact point with consumer (or with dealer or both), and the mechanism to carry this policy into effect.

More particularly with reference to the training of salesmen the examples given show that in so far as a definite institutional character by means of these elements is built up, the task of training salesmen, or salesmanagers becomes also defined. This task, as we have seen in the case of the chain store system, consists of equipping men with a mastery of the details which give an institution its institutional character in the eyes of the buying public so that these men can faithfully reproduce or exemplify its characteristics in the field to which they are sent.

IV

The Branch Store Institution. The distribution and selling of certain highly specialized products, such as tires, automobiles, sewing machines, electrical appliances, graphophones and Victrolas, dictaphones, calculators, cash registers, typewriters, etc., represent a somewhat more complicated problem in the development of an institutional character even though the fundamental elements which must be borne in mind are essentially those which have been enumerated above. Although in many cases such products are sold to independent dealers there has also been a decided tendency toward the establishing of company branch stores or company controlled selling agencies. This development was inevitable, chiefly because the sale of such products is so closely bound up with subsequent service. For instance, in buying an automobile or a sewing machine, the customer is vitally concerned with the nature of the guarantee or service which accompanies the purchase. And since only the manufacturer is in a position to make this guarantee or to render service which may become necessary subsequent to a purchase, he has naturally found it advisable to combine the sale of his product with service stations which guarantee its maintenance.

Although development in this direction has been extensive, it has by no means been all of a kind which would tend to establish business enterprises as institutions in the eyes of the public. A conspicuous success in establishing a genuine institutional character is the Ford Company. The success of this company is due not so much to the in-

evitable sameness of all Ford cars as it is due to a number of other factors, as, for instance, dependability of performance, the nature of the guarantee, the ever-present and usually efficient service station, and a policy complete in detail and consistent in its application. The fact that a Ford store or service station (like a chain store) is easily recognizable, still further establishes the Ford Company as an institution in the eyes of the public, although this similarity is probably one of the less important of the several factors which contribute to the final result.

There are many examples which more or less closely approximate this type of institutionalism. We may mention as conspicuous instances the National Cash Register Company, the Singer Sewing Machine Company, the Winchester Repeating Arms Company, the tire business of the United States Rubber Company, and of several other rubber companies, a number of typewriter companies, possibly the companies we know by the names of Texaco, Socony, Tydol, and other oil companies, the Mack Truck Company among makers of commercial automobiles, and others. In each case we have a specialized product which requires a special type of service, and a system of distribution the keynote of which is the company branch store or company controlled agency.

What is the significance of an institutionalism of this type in the training of salesmen? Broadly speaking, its significance is that these institutions, having developed the products and marketing methods which give them their institutional character, are in a position to train their salesmen in terms of their institutional characteristics. They do not have to rely upon those general, stereotyped courses which concern themselves so largely with vague psychological principles, with types of appeal, with the direct and indirect approach, the immediate sale and the deferred, the cultivation of tact, etc. Instead of teaching their salesmen the *art* or *science* or the *knack* of selling, as expounded in a book which some one has written upon the subject, such institutions are able to train their salesmen in the methods of selling which they, as institutions, have developed. The National Cash Register Company, for instance, does not train its salesmen in the *art of selling* but in the *art of selling National Cash Registers.* And since the art of selling National Cash Registers consists of carrying out the institutional characteristics of that company, its position as an institution is still further enhanced. This is what we mean by institutional selling as opposed to individualistic selling.

V

The Dealer Type of Institution. When we come to the type of business which markets its products through independent dealers over which it has no definite control, we find a situation which presents the most serious obstacles to the development of an institutional character and hence to the training of institutional salesmen. Obviously, the greatest obstacle is the individuality of the dealer. The independent dealer usually has a method of retailing peculiar to himself and is converted to the methods of a company only through education of one kind or another. It is in this field that the individuality of the salesman of today is probably most important, because through him the policy of a company reaches the dealers who ultimately carry it to completion. For this reason the training of the salesman who is to "sell" this policy is far more important than it is in the case of institutions

which like the chain stores have absolute control of their outlets to the public. Before this training can effectively begin, however, a business enterprise must have developed a marketing policy complete in detail and consistently adhered to. This policy will manifest itself in the quality and style of its products, the manner in which these products are packed both as regards the packing of the retail units and the packing of quantities for shipment, the use of trade-marks and labels, the character of its catalogues and sales literature, the nature of its advertising either local or national, the character of the window displays which it is prepared to furnish its dealers, the assistance which it plans to give dealers in other ways, as, for instance, the obtaining of credit, the use of stock records, the moving of shelf-worn or obsolete goods, the introduction of new lines into public favor, and a number of other kinds of services which many companies are now finding it profitable to render to those who ultimately dispose of their products. The question of price changes, the return of goods, the handling of damaged goods, and a number of other aspects of marketing must also be subject to a clearcut policy. (While all these details of comprehensive marketing policy must be determined by the executives of the company, their execution for the most part is in the hands of local sales managers and salesmen.)

A company which lacks a definite marketing policy or one whose policy is not comprehensive cannot hope to be regarded as a full-fledged institution, and cannot train its salesmen in institutional selling. It is naturally dependent upon the old-fashioned type of salesmanship with all the inequalities which the individualistic type of salesmanship involves, and the training of its salesmen will be limited to the generalities which have characterized the training of salesmen in the past. On the other hand, the company which has a fully developed and consistent marketing policy characteristic of itself and its product, is able to train its salesmen in what is properly called *institutional selling*.

VI

Institutionalism and Originality. If the drift of this discussion has been clear, the objection may be raised that the training of salesmen by an institution will result in automatons who will carry out, with mechanical perfection and uniformity, the characteristic methods of the institution which has trained them; and salesmen so trained will be deprived of all individuality, all initiative and originality. No one familiar with the practical aspects of selling will for a moment harbor such a fear; for it is obvious that no institution, no matter how unique its methods or consistent its policies, can ever be perfect; and however perfectly an institution may train its salesmen, it will never create salesmen who can meet, automatically, every situation which will confront them when actually in the field. Proper training will, to be sure, limit the salesman's activities in certain respects, as, for instance, the territory which he may cover, the promises and claims which he may make, the terms upon which he may sell, etc. But within these limits, the institutional salesman is one who is so well equipped with the details of his company's marketing methods that he is enabled to use his individual resourcefulness and originality to the best possible advantage.

(*The conclusion of Dr. Link's article will appear in November Administration.*)

DIVIDENDS IN SECURITIES

BY W. A. PATON*

ALL dividend and other payments by the corporation to its shareholders may be divided into two main classes:

1. Those which call for the actual disbursement of cash or other corporate property to the individual investor.

2. Those represented by the issue to the stockholder of the corporation's own securities—stocks, bonds, notes, or scrip.

The general distinction between these two classes is fundamental—a fact which is apparently seldom realized. The first type of payment always involves an actual decrease in corporate property. Corporate assets are turned over to the members of the company, the title to the property affected becoming vested in the stockholder as a result of the transaction. Such a disbursement brings about a reduction in both sides of the corporate balance sheet; assets are diminished and the shareholder's equity in the company is correspondingly contracted. From the standpoint of the stockholder a payment of this class always involves the actual receipt of assets formerly in the possession of the corporation, and is naturally accompanied by a shrinkage in the value of his interest in the company. The property received is usually cash, but it may consist in securities (other than those issued by the disbursing enterprise), merchandise, or other assets of the corporation.

Dividends proper are confined entirely to this first class. A genuine corporate dividend consists in the disbursement of cash or other property to the shareholders within the amount of the true accumulated earnings. The excess of property disbursed to stockholders over the amount of undistributed income would, of course, constitute a liquidation of investment (or of "capital surplus").

Disbursements to stockholders in the form of securities emitted by the disbursing company, on the other hand, in no way disturb, immediately, the corporate assets. Such a transaction neither decreases the asset total nor affects the identity of any individual property. Nor does a payment of this kind affect the *total* of the liability side of the balance sheet. From an accounting standpoint the entire immediate result of a stock or other security dividend lies in a more or less important realignment of proprietary and — in some cases — liability accounts. The recipient shareholder, accordingly, does not receive a dollar of corporate property. His financial status is affected only in that his interest in the company has in part been expressed in new terms.

It follows that dividends in the form of the securities of the declaring company are never real dividends. This is essentially as true in the case of a dividend paid in bonds or notes as in the case of a stock dividend. All such dividend transactions have no immediate effect upon the corporate assets, and hence cannot be considered as genuine distributions to shareholders.

II

Security dividends, particularly the stock dividend, have been receiving

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especial attention in recent years in connection with the income tax program of the federal government. This program, from the outset, has involved the principle that corporate earnings in the hands of the recipient shareholder are subject to the additional taxes known as surtaxes. Further, until the decision of the Supreme Court delivered March 8, 1920, the Treasury Department treated stock and other security dividends as the equivalent for tax purposes of payments in cash or other property. At present all corporate distributions except stock dividends and dividends paid out of earnings accumulated prior to March 1, 1913, or out of capital, are considered to be taxable income for the purposes of the surtax. That is, dividends paid in the bonds, notes, or scrip of the declaring company are still held to constitute taxable income. A fundamental distinction is thus drawn between dividends in stock and dividends in other securities. Stock dividends, under the present situation, are not considered to represent income to the shareholder; dividends in securities other than stocks, on the other hand, are classed with true dividends paid in cash or other property, and are rated as taxable income to the recipient.

This situation is somewhat unreasonable—aside from the question of double taxation involved. There is no line of cleavage between a stock dividend and a dividend "paid" in the declaring company's bonds, for example, so fundamental that the former may be excluded from income while the latter is included. The only underlying distinction here, as has been indicated, is the one which separates all dividends paid in corporate assets—all true dividends—from so-called dividends which consist in the emission of additional securities. The decision of the Supreme Court just mentioned was based upon the fundamental proposition that without an actual apportionment of cash or other corporate assets among the shareholders no corporate earnings can become income to the individual investor. With a few minor changes in phraseology the court's opinion, it is believed, could be applied directly to an interpretation of a dividend paid in the declaring company's bonds or other terminable security. Literally, the court held only that stock dividends are not income to the recipient shareholder and hence are not taxable under the sixteenth amendment; generalizing, however, this decision may be said to mean that no dividends, so-called, which do not result in a diminution of corporate properties and in the receipt, by the shareholder, of something "out of the company's assets for his separate use and benefit" can be said to constitute income.

It clearly follows from this decision that the Treasury Department has been adhering to an unconstitutional policy in persisting in the taxation of the shareholder in the "personal-service" company upon his *pro rata* interest in the undistributed earnings of the corporation.[1] Such earnings surely fall as completely short of constituting income to the individual stockholder as do those which are expressed by stock dividends. Further, as has just been suggested, all dividends which are paid in the declaring company's securities other than stocks can, under this decision, scarcely be rated as taxable income. To make the validity of this proposition quite apparent it will now be necessary to consider the nature of the security dividend in some detail.

III

The most common security dividend is that which is paid in the stock of the

[1] The Act of 1921, provides for the abandonment of such taxation as of December 31, 1921.

issuing company. The emission of dividend stock is a familiar corporate practice, a practice which has, nevertheless, been much misunderstood. The accountant has always insisted that the stock dividend was really no dividend at all, and this opinion is substantiated by the Supreme Court decision referred to above. Popularly, however, there is still a noticeable tendency to misinterpret this transaction, and this may in a measure justify the restatement here of considerations long recognized in certain quarters.

The declaration and issue of a stock dividend is a transaction which in no wise disturbs the totals of the corporate balance sheet, does not affect the assets in any way, and does not alter the equity class except with respect to individual headings. It involves merely a transfer of an element of the stockholder's interest from one account to another. Surplus is charged and capital stock is concurrently credited. Accumulated profit figures are in whole or in part combined with the amount of the original investment. The total of the shareholder's equity is not affected; it is simply cut up into a greater number of aliquot parts. The fractional interest of each stockholder remains the same (assuming that the new stock can be distributed exactly in proportion to the holdings of the various investors). Book value *per share* is proportionately reduced; and the market price per share is lowered (as far as the effect of this particular transaction is concerned). In no sense whatever does the corporation part with any funds or the stockholder receive any. Indeed, if a single account were being used to represent the entire interest of the stockholder no accounting entries whatever would be required by such an occurrence. In other words, it is only as it is considered necessary to preserve the par of the capital stock in a separate account, that the issue of the stock dividend constitutes a transaction which requires a record by the accountant.

What, then, is the significance of such a transaction? Let us attempt to answer this question first from the standpoint of the issuing company and its management. The principal legitimate reason for the issue of the stock dividend is found in the desire on the part of the board of directors to insure the permanent retention of profits in the business. Once surplus has been capitalized it cannot legally be absorbed through dividend appropriations. To insure permanent expansion at the expense of immediate cash dividends, then, the stock dividend device is sometimes utilized.

This should not be overemphasized. The stock dividend in itself does not bring about the growth of the enterprise. The fundamental thing is the decision on the part of the management to permit profits to accumulate. If the directors refrain from declaring cash dividends (or dividends payable in other assets) the enterprise will expand (if there are any profits) just as surely as it would if additional stock were issued to cover the profits. The stock dividend simply clinches the matter, makes it virtually impossible to reverse or alter the decision to restrict or avoid altogether the disbursing of actual funds or other assets to the stockholder to retire the increase in his equity resulting from successful operation.

Less reasonable excuses for the stock dividend are common. The desire to obliterate or cover up the surplus account, to conceal the fact of profit accumulation, may be responsible. The needs of the business may make cash dividends out of the question and the management may not care to permit the amount of undivided profits to remain a patent figure on the balance

sheet. Unfortunately, it is sometimes true that the purpose actuating those having authority over the preparation of the financial statements is to obscure rather than to disclose. The directors may not wish to have the public, the employees, or even the scattered stockholders fully aware of the extent of the profits.

To some extent, perhaps, the stock dividend has been used as a stockholder's pacifier. The claims for dividends have been met in some cases with the stock dividend, a dividend in a purely nominal sense. If the stockholder were keenly appreciative of the true situation it is hard to see how he could derive any marked satisfaction from such a procedure, but the stockholder often appears to misunderstand the transaction. Still another excuse for the stock dividend has been the desire on the part of the insiders to manipulate the market price of the stock; the rumor of a "melon-cutting" has long been used as a bull argument on the stock exchange. In the case of stock with a very high market value the stock dividend may be used to cut this price down to a more popular and convenient figure for trading purposes. Dividend stock may also play a part in fights for control if it applies to a particular issue among several outstanding stocks emitted by a single company, especially one having a high voting power.

From an accounting standpoint the issue of a stock dividend may be opposed because it tends to obscure original investment and accumulated profits. In this connection we find another excuse for the stock dividend. To increase the *apparent* investment and sacrifice of the investor so as to permit of a larger aggregate cash dividend without increasing the *rate* of dividend with respect to formal capitalization, the stock dividend has sometimes been resorted to. This, like most of the other reasons given, exhibits the stock dividend in the light of a device or expedient of a somewhat questionable character.

IV

What is the significance of the stock dividend from the standpoint of the recipient stockholder? As has been already indicated the individual shareholder's fractional interest is unchanged thereby. The literal effect of the transaction is confined to an increase in the number of shares which he holds. He receives an additional certificate to cover the new stock, or his old certificate is exchanged for a new one covering his entire holding. It is hard to see how he is in any way "advantaged" by the transaction. It would be unreasonable to expect the total market value of his stock (old and new) to be essentially changed as a result of the fact of the stock dividend alone. Of course, the effect of a stock dividend upon market prices could not be precisely ascertained in any case because the securities market is constantly subject to manifold influences. But only in so far as the insuring of the retention of profits in the business augured for a more marked success in the future could a legitimate bull argument be deduced from the fact of a stock dividend. It might happen in a particular case, of course, that the declaration of the dividend was the first reliable indication to the stockholders at large of the fact of accumulated profits, and in such circumstances some appreciation of the stock on the market might result; but in general it is the showing of net revenue and surplus in the financial statements rather than stock dividend policies which discloses the degree of success attending the operations of an enterprise. At any rate, the fact that the declaration of a stock dividend may

be an indirect notification to the stockholder that the company is making money—a condition with which he should have been acquainted by other means—can hardly be held to be a point of importance in determining the essential character of such a dividend from the standpoint of the shareholder.

As was indicated above the rumor or declaration of a large stock dividend may cause an upward flurry in the market price per share of the security affected. But the actual *emission* of the new stock, it should be emphasized, is bound to result — in the absence of other potent influences — in a fall in price per share roughly proportionate to the percentage of increase in outstanding capitalization.

Indeed, to the shareholder interested in immediate cash dividends the declaration of a stock dividend should be a discouragement. Such action by the directors serves notice upon the stockholder—if he understands the transaction—that to the extent of the new stock issued accumulated profits are permanently removed from the field of possible dividend appropriations. Profits so capitalized can never be distributed—except by final liquidation. It is only as these funds in turn earn profits that the directors can make any actual disbursements to shareholders in connection therewith.

The recipient shareholder might, of course, sell the additional shares. Such a procedure, however, would reduce his fractional interest in the controlling equity. Further, if he sold the dividend stock he would realize no more surely, than if, in the absence of a stock dividend, he disposed of original shares equivalent in amount to his equity in the possible stock dividend. In this connection it may be pointed out that a stockholder is often in a position to "declare" his own dividend provided there is an active market for his stock. Ignoring other and possibly more potent factors it may be said that the effect of successful operation and profit accumulation will be reflected in an advance in the market price of the stock. If the directors do not disburse these profits to the waiting shareholder he may, nevertheless, in a sense withdraw his interest in the earnings by selling shares with a value equivalent to this interest. This would, of course, reduce his proportionate equity, but he might still retain shares with a value equal to the amount of his original investment. Indeed, if market values and book values were always identical —a condition not even approximated in most cases—the dividend policy of the directors would be largely a matter of indifference to the individual shareholder, aside from the single question of the maintenance of his fractional interest.[2]

Thus even the cash dividend, it must be admitted, does not in itself change the total of the stockholder's wealth in the broad sense. Such a dividend, as has been explained, extinguishes a part of the stockholder's equity in the corporation. In a quiet market it will commonly result in an immediate decline in the price per share (from the level reached just before the stock becomes ex-dividend) approximately equivalent to the amount of the dividend per share. Thus, fundamentally, *it is the process of successful operation on the part of the corporation rather than the payment of a dividend per se which increases the wealth of the shareholder.* To a degree the corporation is only the agent of the investor, using his funds and regularly reporting a record of stewardship. As these funds are enhanced as a result of business operations the investor's equity in the com-

[2] Strictly speaking this would be true only on the basis of the assumption that the interest of the shareholder is indefinitely divisible.

pany is increased correspondingly. From time to time those in authority actually pay him sums based on the record of earnings. This act converts a part of the investor's wealth from an equity in a corporation to distinct assets over which he has complete control. If the dividend is in cash this means an increase in the stockholder's purchasing power without any necessity on his part of conversion, either by hypothecating his stock or actually disposing of it.

But it is not intended to indicate that the dividend in cash or other property is on a level with the stock dividend. Quite the contrary. From any standpoint the two transactions are entirely distinct. As has been indicated, one involves a reduction in both sides of the corporate balance sheet and the actual transfer to the individual shareholder of assets in which he previously had only an equity. The stock dividend, on the other hand, has no essential effect upon the corporate balance sheet and leaves the stockholder in virtually the same position as before.

V

Thus far, in discussing the stock dividend, the new stock received by the shareholder has been assumed to be essentially the same in kind as the old. This, however, need not be the case. Dividend stock may be of a quite different grade or preference from the original stock held by the recipient. The new stock may be preferred as compared to the old with respect to income and it may carry quite different voting privileges.

What is the significance of a dividend "paid" to the common stockholders in the preferred stock of the declaring company? In essence the transaction brings about the same results as the one already discussed. From an accounting standpoint, on the books of the corporation, the emission of such a dividend likewise results in a charge to surplus and a credit to capital stock—an amalgamation of earnings and investment accounts. The only peculiarity of this case lies in the fact that a portion of the general interest of the stockholder has been segregated and covered by a security to which attach special privileges and restrictions.

From the standpoint of the stockholder, similarly, this transaction leads to results almost identical with those of the more typical case. The shareholder receives no corporate asset; the earnings are not actually apportioned. The net result is a restatement of his equity. His interest in the company is unchanged in amount, but a part of it has been relabeled and has been given explicit recognition in the form of a new security. Again it is only by selling some of his stock that he can actually convert any part of his investment into legal tender. And this he can do only by impairing his fractional interest in the control of the company (except in the very unlikely event that the new stock has no voting power or other means of exercising control).

This brings us to a consideration of dividends in securities other than stock. Bonds, notes, and scrip, as was stated at the outset, are sometimes emitted as dividends. What is the significance of such transactions? In what way does a dividend of this type differ from the stock dividend? Suppose, for example, that a company with an accumulated surplus of $100,000 issues a *pro rata* dividend for this amount in 10-year, 6 per cent bonds. What is the effect of the occurrence from the point of view of the issuing company? The transaction would be recorded, in summary, by a charge to surplus and a credit to the bonds account. This is evidently another case of a transaction which

does not disturb the totals of the balance sheet. No assets are eliminated; the total of the equities is unchanged. The essence of the operation is again a reduction in one equity heading and an equal increase in another. As compared with the stock dividend the only immediate difference lies in the fact that the character of an interest has been changed. The amount of $100,000 has been transferred from surplus to a liability account. The same people—initially—are involved, but they now have two kinds of rights in the situation.

Ultimately, of course, the company must pay the bonds and thus actually distribute assets to the holders (whoever they are at that time). But until the date of payment is reached the effect of the transaction upon the company is substantially the same as that resulting from the stock dividend, aside from the increase in the interest charges. Further, the payment of the bonds need not necessarily mean a permanent reduction in capital, as the company might issue new securities to secure the funds necessary to retire them.

The position of the recipient shareholder is likewise little changed by the occurrence. He now holds the corporation's promise to pay, but he has received no corporate asset. A dividend bond is a resource about on a level with a stock certificate. To realize on dividend stock it would be necessary to sell, assign, or hypothecate the security; exactly the same may be said in the case of the bond. From the standpoint of the individual shareholder's immediate interest the difference between the stock and bond or note dividend simmers down to one principal point: in the case of the latter the stockholder may realize by sale without reducing his proportionate control through stock ownership, while in the case of the stock dividend the sale of the additional shares will disturb his relative position in this respect. On the other hand, in so far as any control whatsoever attaches to the ownership of the dividend bonds, their sale results in a lessening of the total influence of the individual investor.

In the case of the short-term scrip dividend the immediate effect of the transaction on the company's books would be the same as that described above. The final effect, however, would be essentially identical with that resulting from the cash dividend. A genuine scrip dividend is virtually a postponed cash disbursement.

Nevertheless, where a corporation which is financially embarrassed resorts to the scrip dividend the immediate situation from the standpoint of the shareholder is about the same as it would be were no dividend action taken. The stockholder may, of course, endorse the scrip and obtain cash from some bank; but this amounts to a loan from the bank to the individual investor. Under these circumstances the shareholder is really borrowing to pay his own dividend. The company, it is true, is signing his note with him, but if its credit is such that the directors consider it inexpedient for the corporation itself to borrow the necessary funds for the dividend, this fact is of small immediate advantage to the stockholder. If all goes well and the corporation takes up the scrip when due, however, it is clear that the *ultimate* effect of the transaction is the same as that of the cash dividend.

VI

In conclusion, let us return for a moment to the question of taxation. If the foregoing statements are reasonable, it appears that the decision of the Supreme Court referred to can be ap-

plied, in the main, to all dividends paid in the securities of the declaring company, whatever the type of security used. The shareholder who receives a dividend in the company's bonds, for example, is in precisely the same position as the shareholder who receives a stock dividend, aside from the single consideration of control.[3] In both cases the sale of the dividend security is necessary to realize, and in both cases such sale will reduce the investor's interest in the company. In both cases—unless we assume that absolutely no authority or influence attaches to the ownership of the bond—the disposal of the dividend security affects the position of the investor with respect to his control of the affairs of the enterprise. In the case of the bond dividend, the recipient could sell the security without affecting his proportionate interest and voting power *as a stockholder*, although he would necessarily give up his rights and influence as a bondholder.

But this single fact of variation in control is hardly a controlling consideration with respect to the determination of what is income and what is not income. The essential features are the same in both cases. In neither case does the corporation apportion any of its assets. Realization in either case can only be accomplished by the efforts of the investor himself through the complete or partial transfer of his holdings of corporate securities to some other party. To realize, he must declare his own dividend. Thus we do not have taxable income in either instance.

In the light of the Supreme Court's decision the proper procedure for the Treasury Department, accordingly, would be to treat all dividend payments in the securities of the declaring company as merely formal transactions redefining and re-expressing the equity of the investor. When such a security is *sold by the investor* the transaction should be viewed for tax purposes as the disposal of a part of his original investment, and taxable gain or loss would arise according to the circumstances of the case. (This would involve merely an extension of the present rules covering dividend stock.) When a terminable dividend security is finally *paid by the corporation* it becomes a true dividend to the holder (if he is the initial recipient) and should then be included in taxable gross income (if the security when issued were based upon undivided profits accumulated since February 28, 1913). That is, the date of actual payment by the corporation, rather than the date on which the security is issued, is the point at which apportionment and realization occur. In the case of short term scrip, of course, the actual dividend follows the nominal dividend closely; nevertheless, here also it is the second event and not the first which indicates realization by the investor.

It may be objected that an evasion of surtax would be permitted should the Treasury Department actually take the stand just suggested. The investor receiving a terminable dividend security, it may be urged, might sell this security to another party, and when the actual disbursement was received by the new holder he would be subject to tax only in so far as the sum received exceeded the cost to him. Thus the profits of the corporation would finally be distributed without finding their way directly into any individual's taxable gross income. This objection is not sound. In the first place it must be remembered that (as stated in the preceding paragraph) the shareholder receiving a dividend in bonds, for example, would be required to pay a tax as

[3] See the dissenting opinion of Justices Brandeis and Clarke in *Eisner v. Macomber*, 252 *U. S.* 189.

he disposed of these bonds in so far as the proceeds exceeded the proper fraction (determined as now for unhomogeneous stock dividends) of the cost (or other proper basis) of his entire investment in the company. Further, there would be no possible evasion resulting from treating bond and other security dividends as suggested which would not also result from the issue of a stock dividend. Consequently, a procedure on the part of the Treasury Department which accepted the Supreme Court's decision in principle as well as in letter, which, in other words, consistently distinguished true dividends from security dividends and treated as taxable income only the former (the security dividend counting as a true dividend when payment is actually made by the corporation and the security is retired), would be entirely sound.

The fundamental question with respect to dividend taxation, of course, is the matter of double taxation. Is it equitable to attach an income tax to a residuum of corporate earnings in the hands of a recipient shareholder—even when paid to him in cash—after these earnings have already passed through the door of taxable income? Certainly there is much to be said on the negative side. We would doubtless all agree that to require a bank to pay an income tax on the interest accruing in favor of its depositors and then, in addition, to levy upon the balance received by the depositors would be highly unreasonable; and the subjection of the dividend recipient to an income tax is a somewhat similar procedure. On the other hand it must be remembered that the double taxation is only partial; and there are no doubt some considerations which support a tax program which falls with especial severity upon the very wealthy investor. However, a discussion of the pros and cons of this problem is entirely beyond the scope of this paper.

BUSINESS STATISTICS AS A BASIS FOR BUSINESS PLANNING

BY RAY VANCE*

"IF it is not useful then it is not worth while." Should that sentence be applied to the whole range of human activity and environment, then the definition of the word "useful" must be expanded to such an indefinite extent as to take away all real value from the entire conception; but when the application is limited strictly to business considerations and to either business or financial management, then the idea may be accepted as true in the common and restricted sense of the word "useful."

This always was true, even in the days when business was local and extremely simple in its forms of organization, but the necessity for keeping it in mind has been tremendously increased with the coming of complex organizations for production, financing, and marketing. Today the business executive is compelled to spend a very large proportion of his time and of his resources in activities whose ultimate benefit must be of an indirect nature. On account of this he is in constant danger of wasting both time and resources in activities whose ultimate benefit is really nothing.

Into such a situation, the past 20 years have brought a constantly growing activity called "business statistics." This activity can contribute only indirectly to greater production or to larger profits and, before the business manager or the financial manager who invests funds devotes either time or money to such an activity, he is justified in asking the business statistician: What value am I going to get out of it?

At first glance, statistics being concerned directly with figures seem to be only an expansion of accountancy which has been a part of business organization for so long that our ancestors were accustomed to call their offices "counting houses." Indeed it is true that business statistics must always include accounting as one of its basic factors, and it is probably fair to say that it represents an expansion of this field rather than a radical change. Professor Horace Secrist has stated the relationship between the two as follows:

> Accounting is concerned with the value aspect of these problems; statistics with the numerical or quantitative aspect, whether value of some other unit is chosen as a measure of activity.[1]

This definition is accurate so far as it goes, but it does not seem to get entirely to the root of the matter. A little earlier in the same work the same author says that "numerical facts are statistics only when placed in relation to each other."[2] This idea comes more nearly to the heart of the matter, but even yet leaves out the main factor of value in business statistics as distinguished from the older ideas of accounting. The most vital difference between accounting and business statistics lies in the all-pervading attitude toward the time element; to render accounting means, literally, to state in concrete figures what has been done in the past, and by such definition accounting may be rapidly expanded to

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[1] "Introduction to Statistical Methods," page 10.

[2] *Ibid.*, page 9.

include those statistical activities which have to do with information regarding past happenings. But if such statistics are to be more than a doubtful asset to the business manager or to the investor, the statistician must take the forward-looking attitude, must think in terms of the future rather than of the past, must indeed become a forecaster in the sense that forecasting is defined in Webster's Dictionary as "Foresight of consequences and provision against them."

The very use of the word forecast in connection with business administration or with investment naturally raises the question whether such an accomplishment is possible. It may be stated briefly that the business statistician believes it to be possible and that this factor runs through every item of useful service which he expects to render to the business manager or to the investor.

II

When the business statistician began to talk about forecasting, the word itself was relatively a stranger in the average man's vocabulary, its use being confined rather closely to the Federal Weather Bureau and the Crop Bureau of the Department of Agriculture. However, the idea in an uncrystallized form has always been one of the most common factors in all human activity. To draw an example familiar to practically every American man or boy—we sometimes see a baseball team in the field with its right-fielder playing close to the foul line but an exceptionally long distance away from the diamond, its center-fielder in the right-fielder's normal position but also far from the diamond and similarly the left-fielder playing deep in the center-fielder's position. At the same time each of the in-fielders will be found moved towards the first base line and further away from the home plate than the ordinary position. Such a shifting of the players is not a matter of chance. It arises from an opinion on the part of the captain or manager of the defensive team, an opinion reasonably established from past experience, that the player who is taking his turn at the bat is likely to hit the ball farther away from the home plate and farther to the right than the average batter might be expected to do. Holding such an opinion the captain makes a forecast, that is he "foresees the probable consequence and makes provision against it," by shifting the positions of his players before the batter has an opportunity to strike at the ball.

Getting more definitely into the field of business activity, this idea that a given set of circumstances will produce a given result enters into the vast majority of business plans, and a large share of the activities of business life takes the form of providing in advance for these expected consequences. For example, the corner grocery storekeeper when he lays in his original stock of goods or when he adds to that stock of goods from time to time, must inevitably forecast, for at least a short period in advance, what he believes will be the demand of consumers in the neighborhood which surrounds his place of business and also what percentage of that demand is likely to seek its supply from him. As we progress into the larger and more complicated business units the absolute necessity for forecasting extends to a constantly increasing percentage of the total activities and becomes an increasingly important factor in the success or failure of the business organization. Mistaken forecasts on the part of large percentages of the total number of business managers may in one case lead to a great overproduction of certain

kinds of goods with consequent business depressions and even panics, which automatically affect all lines of business activities; or if a mistake is made in the other direction it may lead to shortages and to great speculative scrambles for available supplies. In each of these cases the minority who have taken the correct forward view are the gainers, but the business community as a whole is compelled to suffer.

When this great forecasting activity in business management and investment began to be crystallized into an organized and specialized activity it was only natural that its first appeal should be to the speculative instinct. For that reason the early history of business forecasting is largely one of attempts to make sudden fortunes through speculation in stocks or in basic raw materials. The results were highly disappointing. Scientific analysis of business fundamentals can forecast the long tides of business, but such short waves as would enable the stock market or commodity trader to make a sudden fortune have so far baffled the skill of the best business statisticians or economists.

III

The next development in point of time followed another instinct of human nature as deeply ingrained as the speculative instinct, that is the instinct to seek some magic formula or method by which business success can be assured without the years of consistent effort which have always been a part of it. In this development there was a tendency to make the application of economic statistics to business forecasting a kind of fetish, just as "system," "advertising," "efficiency," or "industrial democracy" have been made fetishes by certain business men at other times. This idea produced such catch phrases as "making your business always sail with the tide," implying that it was possible to foresee great outside changes and let one's private business drift with these to easy success. Taken in this way business forecasting was again bound to be a disappointment.

It is apparent that the man who is persistently inefficient in the production of goods, the man who neglects his distributing and advertising plans so that possible customers are never brought in touch with his production, or one who neglects any of the other fundamentals of business success is not going to be able to make up the difference simply by a knowledge of such facts as coming changes in the total coming supply and price of raw materials, the total increase or decrease of coming demand, or the changes in its direction or in its geographical location. Other things being equal, he will have a great advantage, but warning must be given against relying upon forecasting to take care of other fundamental deficiencies.

Another way of saying the same thing is that the man who is working towards success in a way sufficiently serious to warrant the use of statistics does not necessarily want to "sail with the tide." He has in his mind a definite goal toward which he wants to move, or at the very least, a definite direction in which he wants to move, and his concern with tides is very largely a matter of consideration as to what effect they will have upon his progress in the desired direction. His course may lie across the tide or even against it, but there will be a much greater certainty of arrival without disaster as well as a greater net speed if he knows what forces and currents within or without his own particular business can be used for assistance, and

also what forces and currents within or without must be guarded against or allowed for in the making of his plans.

To make this abstract conception concrete let us take the illustration that the accountant's report upon a certain factory or department of a factory shows it to be operating at a loss. Here is a current with which the business manager cannot sail unless he is willing to accept the port of failure as an ultimate destination. Here is where the business statistician must begin his work. The first operation will be called by some "an accounting operation," and by others will be spoken of as "internal statistics." Whatever the name used he will stop asking what? and begin asking why? and how?

The first step, provided the factory or department has paid in the past, would be to go back to the time when it did pay and trace through intervening weeks, months, or years the tendency or tendencies which have developed, bringing it to a losing proposition. If it has never paid, then he will compare with some similar one that has shown a profit. The results of this step will, of course, show as many variations as there are possible conditions to be investigated. Some of the major things that are likely to be shown are rising labor costs, rising costs of materials, falling prices for the finished product, or decreased demand, with a corresponding increase in the overhead to be borne by each unit of production.

Now we take the second step. The problem cannot longer continue to be one of purely internal statistics. At this point we must discover whether the difficulty arises mainly from purely internal causes or whether it is one that has to do rather with economic changes taking place entirely without the individual establishment. To do this we enter the field of industrial group statistics and we compare the labor costs, the costs of materials, the prices realized for products sold, the amount of products sold, or whatever they may be in which we are most interested, with the same items for other concerns operating in the same field. If we find that the difficulty is a failure to attain the same efficiency which has characterized other organizations, then our third step which involves foresight of consequences and provision against consequences must either take the form of some radical change within the organization itself as to personnel methods, geographical location, or whatever factor has caused a lack of effectiveness, in such a way that we can forecast profitable results, or else we must advocate the discontinuance of the whole organization or department to avoid the loss of capital.

If, on the other hand, our second step shows that the difficulty confronting the individual organization which we study is one common to the entire industry, then we take still another step in the enlargement of the scope of our statistical study and enter the field of general business forecasting. We ask whether labor costs in general are likely to decline, and if so, how soon? Similarly, we seek to determine whether the prices of raw materials may be expected to decline, and how soon? Whether it would be possible now or in the near future to increase the selling price without any marked effect upon total volume of demand, or whether a marked increase in total volume of demand is to be expected in the future, and again we seek to answer the question, how soon? Assuming that the particular business under discussion in our illustration has come into its losing position through factors outside of itself, the time ele-

ment becomes the determining factor in saying what course the manager should follow. If the time for improvement is very far distant he may find unavoidable overhead so high that it would pay to abandon the entire proposition. This would be a very extreme case. It is quite common, however, that the time for improvement is so far distant as to make it advisable to curtail or completely stop production through the waiting period. On the other hand, it will very frequently be found true that the time for improvement is so near at hand as to warrant a continuation of full production, knowing that the benefits of being ready to take advantage of improvement at its very earliest stages will more than counterbalance the temporary book losses of the waiting period.

The illustration which we have given for study of a business being conducted at a loss, is equally applicable to one which finds itself making abnormally high profits, except that in the latter we seek the time when the abnormally favorable factors in its operation are likely to disappear, and seek to prevent the laying of plans which might result in disaster when the readjustment takes place.

IV

So far we have discussed and illustrated the use of business statistics in a general way, intending to show that it is part of normal business activity rather than any mystical formula. We may now make this more concrete by listing nine basic principles which should be kept in mind in the application of statistics to business managements or to investments and speculation. These are:

1. The scientific use of business statistics can forecast large movements but not the small waves of price or volume fluctuations which occur from day to day or from week to week. For this reason it cannot be used as any reliable basis for the sudden speculative accumulation of wealth.

2. The science of business statistics inevitably involves great research into conditions as they are and as they have been in the past, but the real object of all this research is a means to an end rather than an end in itself. The real object is to foresee what conditions will be in the future and we use these future conditions as the basis for forward looking plans.

3. Some of the forces which are measured by business statistics are those which may be classed as internal for the business itself and are, therefore, in a general way, subject to the control of the managers of the given business. Statistics of this type belong to the budgetary or management information, and the manager forecasts from them with the object of controlling the events rather than of adapting his policy to the events which they foreshadow if left uncontrolled.

4. There is a second group of economic forces measured by statistics that are, generally speaking, outside of any individual business, but are, for the most part, within some single industry. These forces cannot be controlled by the management of the individual business, though it is possible for them to be very greatly modified by concerted action among the managers of a considerable number of enterprises in the industry. These forces belong in the field of commercial associations statistics. They may conceivably be considered factors to be controlled by co-operative movement, but, failing such control by co-operation, the individual manager must seek to foresee their effect and adjust the management of his business to those effects which he cannot change by any individual effort.

5. There are other forces measured by statistics which arise from causes that, generally speaking, are outside of any individual business or any given industry and cannot be controlled by the management of any business. These are such things as the great rises and declines of commodity prices and security prices or as general depressions or periods of general prosperity. The individual business manager or investor may join with others in an attempt

to control some of these factors by co-operative effort but, so far as his individual business is concerned, he must adapt his policies to these movements rather than to expect to control them. No amount of conservatism can wholly avoid the effect of these forces, and the only real protection against them is foresight based on knowledge. It is this third type of economic movements which is most commonly considered in business forecasting and will constitute the main theme of the present article.

6. All economic happenings whether they concern an individual enterprise, a given industry, or the entire business world, may be divided into two classes: One of these occurs at stated *periodic* intervals such as the planting and harvesting of a crop, the recurrence of elections which are fixed by constitutional enactments, or any other factor whose time of occurrence is a certainty. The other group is of the *continuous* type such as the changes in the price level or the variations in the volume of demand. In this second class of forces, variations are occurring constantly and we must be on the lookout for a change at any time.

7. The important factors in any economic movement are *direction*, *extent*, and *time*. In measuring continuous movements such as price movements or industrial production, we may practically disregard the element of direction, for manifestly it can be covered by the simple formula that if the present movement is upward then the next change in direction must be downward, or vice-versa. In other words, forecasting which only tells us that when we are abnormally high we shall eventually have a decline, or that when we are abnormally low we shall eventually have a rise, would have no practical value whatever. In periodic changes, such as crop production, direction is highly important. The matter of forecasting the extent of any movement is one of very great interest, whether the movement under consideration be continuous or periodic. It must, however, be linked with direction in forecasting periodic movement and is approached through the time element in forecasting a continuous movement. The factor of greatest single importance in general business forecasting is the time element. How soon will prices which are now declining stop declining and begin to rise, or, if prices are rising how long before a decline may be expected? Similarly, how long are conditions of abnormally large or abnormally small demand to continue? When is the turn to come? These are the questions around which business forecasting must necessarily center. Many a theoretically solvent business enterprise has been forced into bankruptcy because the assets were temporarily unsalable, while its liabilities were immediate. Many a business has failed to realize a justified amount of profits from expansion of demand because its managers were still thinking only of economy and contraction when they should have been preparing to take care of a demand already imminent. Similarly, investors have lost money by buying the best kind of securities just before a general fall in price or have made money by buying relatively poor securities when a general upward movement was about to begin. It all comes back with the question, *when?*

8. Any given economic movement of either prices or volume of business is never the result of a single cause, but of a complex number of causes which are constantly varying in intensity and of which only a part can be adequately measured by statistics. Business forecasting, therefore, is a matter of mathematical approximation rather than of 100 per cent accuracy. The honest statistician must confess this and the wise business manager and investor must, in applying statistical forecast to his business or investments, realize that he is only improving his foresight, not making it absolutely error proof, and must be ready to consider the effect of factors which he cannot statistically measure.

9. Because one happening follows another in point of time is not sufficient proof that any cause and effect relationship exists. This is a very elementary principle of logic, but it is one of those most frequently transgressed by men who volunteer statistical information in order to influence the business or investment activities of others. Such information comes unsought to all, and one of the great purposes of really scientific statistical work is to correctly appraise such information.

BUSINESS FORECASTING IN THE EDISON INDUSTRIES

BY RALPH H. ALLEN * AND JOSEPH J. MEHL †

I—THE BALANCE-SHEET-PROFIT-AND-LOSS STATEMENT

BY "business forecasting" is meant the practice of anticipating the future with a view to avoiding or mitigating business catastrophes, providing for periods of want and depression, and taking all possible advantage of approaching changes.

The history of forecasting in its broad sense is the history of civilization, for each generation has added to things known to be predictable certain things which the previous generation thought were unpredictable. Examples of this increase with every year. Occurrences which were formerly thought to be the result of pure chance are now being forecast with accuracy. Enterprises which from their nature require development for their absolute demonstration are being promoted and financed on the strength of the reports or estimates of value made by actuaries, geologists, engineers, and other experts. Each decade removes some of the conjecture and mystery which formerly surrounded the future. We now know the number of days an ocean voyage will take, and to the minute when eclipses will occur, and can foretell many other events which were formerly thought to be matters of luck, chance, or perhaps entirely of Providence.

It is notable that those individuals who have been able to foresee developments in the world's affairs most clearly have been the leaders. Men have succeeded in direct proportion to their ability, consciously or unconsciously, to look into the future. Napoleon's campaigns were fought out, months in advance, over maps in which he stuck pins which bore heads of colored sealing wax to represent the contending armies. The biographies of other military leaders, including Caesar and Alexander, indicate the use of similar tactics. And we are not limited to military men for examples of successful planning. Thomas A. Edison says the past has been of no use to him except in so far as it furnished a guide to the future. Andrew Carnegie was pre-eminently a futurist when it came to questions of whether or not to scrap old methods and machinery for new. Northcliffe, when asked to tell the maxim which had been of most value to him in his life, replied, "To foresee is to rule." Ibsen referred to this principle when he said, "That man is right who has allied himself most closely with the future."

The great aim of all science is and has been to comprehend phenomena in order to make their effects predictable. With the advancement of science we reach greater and greater degrees of accuracy in our predictions. Something of what has been accomplished in this connection is shown by carefully compiled statistics. The following percentages of accuracy in predictions have been taken, not as a specially picked few, but because in each case the predictions have extended over a reasonably long period of time.[1]

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† General Auditor, Thomas A. Edison Industries.

[1] "Business Forecasting," Jordan.

	Per Cent
The various estimates of the total revenue by the Secretary of the Treasury (a year in advance)	83.6
Wheat production	85
England's national budget	95.1
Actuarial mortality figures	98
United States census estimates of population	99.7

II

Ability to forecast accurately is the barometer of civilization, and ability to forecast accurately in business is the barometer of good industrial management. Hence it can be stated as a cardinal principle that we can determine whether or not a business is being well managed by discovering how accurately it anticipates business conditions. Obviously if we wrongly estimate tomorrow's business demands we will either overstock our shelves with unsalable goods, or forfeit profits which might have been made on unfilled orders—either error resulting possibly in financial ruin.

Today's business is in anticipation of tomorrow's requirements. When we say that other things being equal the business which sees farthest ahead wins, we are simply saying in other words that we stand a much better chance of getting to a place if we know where we are going. In fact, it is this central idea which is behind every sales quota, departmental appropriation, and personal budget.

Business men who never before thought of forecasting their business are beginning to sense its benefits now that the federal government departments are lined up under a systematic national budget. The budget in this case is the first step toward really reorganizing an unwieldly, archaic, and expensive system of federal bureau administration. Many private corporations and firms whose methods are also archaic, unwieldy, and expensive can profit by the example.

This is all very well, someone says; we would all like to know about the future; show us the formula that we may become millionaires overnight. There is no specific formula. Time, patience, experience, reliable and complete statistics, and the development of business acumen through hard knocks, are all required to produce an intelligent and reliable forecast in any business.

Anyone who has seriously considered the methods and purposes of forecasting realizes that foresight is 90 per cent hindsight. No magic combination of figures, formulae, or tables will forecast a man's business for him. No more could a stranger, unfamiliar with a certain business, properly draw up a forecast for it on demand. Success depends in the first place upon the existence of reasonably complete and reliable data, and given this, is in proportion to the effort made accurately to analyze and intelligently use these records of the past.

III

Because of the "lag" of the usual accounting records it is not always easy for the business man to determine his present condition. In fact it is quite difficult in concerns where the ordinary business records and accounts are balanced and completed some time after the close of the period. The trouble with most financial records is that they deal with the past and stay in the past. Here again is an important function of the budget, for a business forecast can be so constructed as to bridge the period between the completed business records and the present moment. With this the business man can tell with reasonable accuracy how he stands today, and with that infor-

mation in hand can proceed with a confidence that otherwise would be impossible.

Anyone in the habit of consulting manuals supposed to give the latest available information in connection with industrial finances will have discovered that such information is usually many months old. This is partially due to the time taken in publication and distribution of the volumes, but to a large extent it is due to the delay in closing of the books of the concerns themselves. Possibly if an average could be struck it would be found that certified balance sheets are from two to four months behind the date of the closing of the books. It is self-evident that the business man who uses the balance sheet as his guide to future operations, and whose latest figures are from two to four months old, is not in a position to maintain an up-to-date control of the business. He must either secure more recent statistical information, or he must find some means of bringing his balance sheet closer to the present. The second plan, that of bringing the balance sheet up to date, and making it a current, live adjunct to management, is the more desirable one. How this has been accomplished in the Edison Industries is briefly described in this article.

The first step is to prepare a budget and in preparing a budget its first basis must be the internal condition of the business itself. The past performances of the various divisions and departments furnish an index to future possibilities. Secondly, the forecast must be based upon a knowledge of external business conditions. The business man who ignores national business conditions when planning ahead shows as much wisdom as the ostrich which buries its head in the sand on the approach of danger.

The background of every purchase and every sale is affected by the basic rate of wages and the average price of commodities. No one who expects the price to lower buys now, if he can help it; in fact, many lines of industry are suffering from this condition today. If the national mass psychology is to expect lower prices, business will be sluggish until the public mind is changed. Barometers exist on every hand to indicate the trend of public opinion in this respect. Every large industry will find that certain factors in national conditions tend to rise and fall with or slightly before its own business. For instance, the price of steel regulates many industries; the price of cotton others. All this bears directly upon the forecast of future business.

Agaiu, suppose for a moment that we are in the textile industry where cotton is a large factor. Whoever is responsible for the business forecasting must be a student of cotton, and be able to analyze the cause and effects of its price fluctuations all the way from plantation to consumer. The recent slump in the cotton market which resulted in so many southern bank suspensions has brought this thought forcefully to the attention of many textile merchants. Hence for some time to come at least cotton men when planning ahead are not likely to overlook the effect of national conditions upon their business.

IV

Recently a statistician made an analysis of the average life of the American corporation, which, according to his figures, is less than seven years. Another expert made the broad generalization that barring some national cataclysm such as war, the business cycle goes through all of its phases within a period of about seven

years. The writers do not subscribe to either of these broad statements in their entirety. They are too general, and it is difficult to apply such generalities to the plane of the particular. Take them together, however, and it would appear that each period of general business depression almost kills off American business. This is too drastic, but each cycle does see an appalling mortality. One has but to read the casualty lists in the form of business failures to appreciate the truth of this statement. Fortunately there is a growing interest in economic and business subjects, which is sure to produce a lower death rate, and already in some lines of business the use of preventative analyses and forecasts is becoming a feature of the daily business routine.

Only a few years ago it was merely a handful of our more progressive corporations that began showing graphically and statistically the fluctuations of their sales for different districts. Quite recently comprehensive methods applicable to entire businesses have been worked out and put into effect. Also many large corporations have gone a step further than merely analyzing sales, and have shown by means of graphs and balance sheets not only what they have done and are doing, but also what they *purpose* doing. The remarkable thing about the prophecies of this modern budget is the regularity and exactness with which the proposed attainments have been realized.

The Edison Industries have had many examples of this. The forecast of November 30, 1921, made 30 days in advance, was so near the actual figures that for all practical purposes it would have been unnecessary to have substituted the actual final figures when they were ascertained. Instances of this same closeness to fact could easily be multiplied. Indeed the forecast ratio of current assets to total liabilities is rarely out of the way by more than 0.02. The advantages of such an accurate advance knowledge of business conditions can hardly be overestimated. It substitutes fairly dependable facts and figures for guesswork and instead of a mere drifting before the wind makes possible a definite and intelligent direction of business affairs.

As a matter of practice the estimated balance sheet of the Edison Industries has proved to be more valuable as a guide to financial control, than the actual figures which subsequently appear, in view of the fact that long before the actual figures are available the forecast presents a picture of current conditions which is sufficiently accurate to be used as a basis for executive decisions.

V

There was a time when closing the business books once a year was considered sufficiently frequent. This was in the days when the average corporation in this country had a capital of $10,000 and employed 15 persons. With the growth of business, it has become necessary in many cases to close the books at least once a month to ascertain the financial condition of the business. As a next step some concerns found it necessary to follow their financial results currently, even daily, in view of the fact that a wrong tendency running uncorrected for but 24 hours may dissipate the margin of profit on a month's sales. Beyond this, more and more, are the progressive businesses of the country finding it necessary to look ahead, plan out the financial results that ought to be secured, and then hew to this line.

It is quite possible for any corporation organized along average lines to

do this—not only to keep a reasonably up-to-date grip on how the business is going, but also to tell with sufficient accuracy for all practical purposes what the condition of the business will be at the end of the current month as to profit and loss and the items making it up, and also as to the assets, liabilities, etc.

This forecasting of results is affected by means of the various budgets described later, the data from which is entered on a modification of the six-column balance sheet, which in the Edison Industries is called the "Balance-Sheet-Profit-and-Loss Statement."

For the purposes of this article the forecast is assumed to be for 30 days, or, say, up to the current monthly closing. When, as is sometimes the case, it is desirable to forecast business for several months ahead, say, up to the end of the current fiscal year, it may be done in 30-day periods. In thus planning the coming business activities in the Edison Industries, the Board of Directors (who are all active officers) first require certain definite reports or statements from the various departments. The more important of these are the sales schedule, the manufacturing schedule, and the treasurer's estimate of financial requirements.

Sales schedules (Figure 3) show in detail the sales manager's estimate of the probable sales and shipments of products by kind, unit value, and total value. They also show the expected movement of goods by months.

While this schedule is discussed in detail as to its feasibility and correctness in view of impending national and international conditions it naturally cannot be approved until the manufacturing schedule is submitted and the two have been co-ordinated.

The manufacturing schedule, practically a part of the sales forecast, is designed to show monthly, the material necessary to complete each month's quota, as shown by the sales schedule, the quantity necessary to manufacture in order to ship each month's quota, and the estimated cost of each month's shipments, together with the unit cost to manufacture each kind of product.

The above information enables the Board of Directors definitely to determine that the requirements of the sales schedule can be met by the manufacturing department and that the margin between cost and selling is sufficient. It also enables them to keep expenditures for advertising, materials, supplies, etc., at a balanced and proportionate level.

The treasurer's forecast (see Figure 1), usually known as the cash budget, naturally follows the above. It shows the probable income and expenditures by months, shows whether the proposed program is financially possible, and indicates what financing is necessary to carry out the business plans finally approved by the Board of Directors.

By the aid of the foregoing forecasts, plus a few other statements explained later, it is possible to prepare exhibits showing both the present and future condition of the business, by each department, division, and corporation, or of the Industries as a whole.

VI

Unless some systematic plan is followed, when all the budgets, appropriations, schedules, estimates, and forecasts are brought together, the industrial manager may well pause in bewilderment and wonder whether there is not some quick, efficient way to co-ordinate and clearly present this information, so as to show each ele-

ment in its true relation to the other and to the whole. The Edison Industries have found the best method of doing this—the most effective means of co-ordinating its forecasts—to be the Balance-Sheet-Profit-and-Loss Statement referred to in the preceding section.

Business men are beginning to realize more and more the importance of the balance sheet as the mirror of their business, whether they are interested in credit negotiations, bank loans, mergers, reorganizations, or current conditions.

The balance sheet speaks a universal language understandable to all financial men, accountants, credit men, and business managers in general. A forecast constructed in its terms needs but little explanation. It is ideal as a forecasting medium, whether divisional or departmental balance sheets are used, or the grand total consolidated balance sheet for the business as a whole. If at the same time the profit and loss items can be indicated, both the causes and effects of the business results may be seen at a glance.

The Balance-Sheet-Profit-and-Loss Statement, the form of which as used in the Edison Industries is shown in Figure 4, is generally compiled in the office of the president, general manager, or chief financial officer, in view of the fact that it is dependent for its component parts upon the reports, budgets, and estimates of a number of subordinate officials. In practice conditions reflected on this statement have in many cases called for immediate attention, so that correction could be made before damage was done. Through the use of this form it is possible to furnish estimated balance sheets to stockholders, directors, officers, or banks, either before or within a few days after the date of closing the books. When the actual figures arrive, perhaps a month or more later, any variation may be analyzed readily. Every time this analysis is properly made it results in greater accuracy in the next forecast.

To simplify the compilation of the Balance-Sheet-Profit-and-Loss Statement in actual use, all debits are black and all credits are red. In the form shown in Figure 4 debits are in roman while credits are italicized to indicate their nature.

A discussion of the various budgets used in the compilation of the Balance-Sheet-Profit-and-Loss Statement follows. For the purpose of simplicity all amounts are entered in thousands of dollars, i.e., the last three figures are in each case omitted.

VII

Cash. Possibly that portion of a company's assets giving most concern to the management is its cash. A proper bank balance must be maintained if the company is a borrower, and since the world's recent painful experience in deflation, business men more and more recognize the fact that the profits realized in cash are the only profits which, not being subject to revaluation downwards, may be called real.

Most concerns budget their cash income and outgo periodically, some using elaborate methods covering weeks and months ahead and some looking forward only a few days. As all profits must finally be realized in cash and all obligations settled in cash, it naturally follows that the efficient treasurer must keep in close touch with all the departments of the business, their problems, and needs. Being a member of the Board of Directors he has knowledge of any proposed heavy expenditures and is thereby enabled to pass on their advisability

Treasurer's Department

Cash Estimate, Month of May, 1922

		M Dollars
Balance beginning	...	503
Receivables collected	850	
Income from Investments	...	....
Bills Payable, discounted Blank Bank due	100	950
		1,453
Disbursements:		
Bills Payable, repaid X Bank	100	
" " " Y Bank	100	
Pay-rolls, 4 at 50	200	
Accruals, Commissions paid	10	
Deferred Charges: Insurance Premiums	6	
Interest on Bank Loans	2	
Payables paid	650	
Expenses	40	
Bonds redeemed	100	1,208
Balance end		245

Figure 1. Treasurer's Cash Estimate

from the viewpoint of their ultimate payment.

For his own guidance, and that of the Board of Directors, the treasurer forecasts his income and expenditures as shown in Figure 1. As in the case of all the estimates used in making up the Balance-Sheet-Profit-and-Loss Statement this estimate is submitted on the first of the month to which it applies.

VIII

Purchasing. The purchasing agent, in close touch with the factory, can estimate its needs for the coming month with fair accuracy. To do this efficiently will necessitate conferences with the factory manager, sales manager, chief storekeeper, production man, and others. The value of such conferences is obvious.

In addition to the factory requirements, other obligations to be assumed during the month must be scheduled. The advertising charges, as a rule, may be accurately forecasted, as may other expenditures for service, etc.

When the purchasing agent prepares his budget it should be checked with the treasurer to ascertain if the expenditure dovetails into the financial program, and that it is in accord with that adopted by the Board of Directors.

The purchasing budget should be prepared in detail and show purchases

Purchasing Department

Estimate of Purchases

Month of May 1922

		M Dollars
Raw Material, Factory Supplies, etc.		480
Equipment		5
Expense: Advertising	50	
Other	20	70
Total		555

Figure 2. Estimate of Purchases

by kind and value, segregated so that it may readily be used for forecasting purposes. The form shown in Figure 2, gives without details the analysis necessary to the proper preparation of the forecast.

IX

Sales. The sales manager's schedule of sales is as accurate as he can possibly make it considering:

1. Past performances
2. Seasonal fluctuations
3. Consumption capacity of the country
4. National and sectional business conditions
5. Competition
6. Obsolescence of the product
7. Selling prices
8. Manufacturing limitations
9. Shipping limitations
10. Unfilled orders

The schedule should be in form similar to Figure 3.

Other Departments. The credit manager's forecast should indicate the probable cash collections as well as the segregation of notes and accounts receivable as at the end of the month. The credit manager's forecast and the treasurer's budget should, of course, dovetail with respect to collections.

The factory manager's forecast should note the probable segregation of the inventories into raw materials, merchandise in process, and finished merchandise.

For accurate forecasting every department of the organization must be represented, and the advantages accruing from the co-ordination of all departments to a given financial program and the interchange of ideas this involves, while invaluable in themselves are merely collateral to the greater good that comes from the answered question, "Where are we heading?"

X

The individual forecasts are now ready for assembly on the Balance-Sheet-Profit-and-Loss Statement.

The elements analyzed, roughly speaking, correspond to the books of original entry, viz., cash book and journals. They are:

Sales Department—Estimate of Sales

M Dollars Month of May 1922

Product	Unfilled Orders to Be Shipped May 1922	Expected Orders May 1922	Total	Expect to Ship May 1922
A	150	75	225	175
B	200	250	450	325
C	50	40	90	75
D	35	10	45	40
E	45	100	145	80
F	90	125	215	125
G, etc.	130	200	330	180
Total	700	800	1,500	1,000

Figure 3. Estimate of Sales

Sales
Collections
Disbursements
  Pay-rolls
  Others
Purchases
Journal Transfers
  Income from Investments
  Pay-roll
  Income Tax Reserve
  Plant Reserves
  Miscellaneous

The above are analyzed into the component items of a condensed balance sheet, which for purposes of demonstration, are assumed to be as follows:

Cash
Receivables
Inventory
Deferred Charges
Notes Payable, Banks
Other Payables
Accruals
Investments
  Working Capital
Plant
Plant Reserves
Bonds
  Capital
  Surplus

As all the transactions of a business are first entered in the books of original entry, the ledgers being used merely to analyze and classify into various accounts the activities of the period, bookkeeping principles are followed in our method of forecasting, the accounts on the Balance-Sheet-Profit-and-Loss Statement corresponding to the accounts of the ledger when the books are closed, though kept in columnar form instead of the usual ledger form. (See Figures 4a and 4b.)

Thus, the "Cash" column is a synopsis of the cash account, the "Surplus" column a synopsis of the Profit and Loss account, etc. The treasurer's estimate is posted opposite Collections and Disbursements into the accounts affected, cash expenditures for expense items being posted direct to the "Surplus" column.

Likewise, the purchasing agent's estimate of purchases to be made is posted opposite Purchases. Materials, factory supplies, etc., are charged to Inventory; equipment purchases to Plant; advertising and other expense items to Surplus.

XI

Sales. The only item requiring special treatment is Sales. The factory cost of sales must be established, and the percentage of gross profit found. It must be recognized, that, due to abnormal conditions, this percentage may vary considerably. Any variation should be discussed during the conferences referred to above.

In the Balance-Sheet-Profit-and-Loss Statement shown in Figure 4a we have considered for the sake of simplicity that the gross profit on sales is 30 per cent.

In the following example the general sales manager forecasts his sales for the month at $1,000,000. The entry on the forecasting form will be:

Charge Receivables.........	$1,000,000
Credit Inventory (factory cost)	700,000
Charge Working Capital.....	$300,000
Credit Surplus (gross profit)..	300,000

The percentage of gross profit and factory-door cost of sales should be verified periodically and any marked changes brought to the attention of the conference.

Journal Transfers. The journal transfers are merely those monthly entries usually made before completing the financial statements of the business. For the purpose of illustration the following are included:

Income from Investments. The

BALANCE-SHEET-PROFIT-AND-LOSS
FORECASTING FORM

	Cash	Receiv-ables	Inven-tories	Deferred Charges	Notes Pay-able Banks	Other Pay-ables	Accruals	Invest-ments	Working Capital	Plant	Plant Reserves	Bonds	Capital	Surplus
Sales	.....	1,000	*700*	....	.....	.....	....	.....	300	.....	....	.....	....	*300*
Collections	950	*850*	......	....	*100*	.....	....	.....	....	.....	....	.....	....	....
Disbursements: Pay-rolls	*200*	......	......	....	.....	.....	200	.....	....	.....	....	.....	....	....
Disbursements: Other	*1,008*	......	......	8	200	650	10	.....	*140*	.....	....	100	....	40
Purchases	.....	......	480	....	.....	*555*	....	.....	*75*	Eq. 5	....	.....	....	70
Journal Transfers: Income from Investments	.....	......	......	1	.....	.....	....	.....	1	.....	....	.....	....	*1*
Journal Transfers: Pay-rolls	.....	......	152	....	.....	.....	*217*	.....	*65*	.....	....	.....	....	65
Journal Transfers: Plant Reserves	.....	......	10	....	.....	.....	....	.....	10		Bldg. *2* Eq. *8*	.....	....	....
Journal Transfers: Income Taxes	.....	......	......	....	.....	.....	*8*	.....	*8*	.....	....	.....	....	8
Journal Transfers: Miscellaneous	.....	......	......	Ins. *2* Int. *5*	.....	.....	Com. *50* Roy. *4*	.....	*50* *11*	.....	....	.....	....	50 11
TOTALS	*258*	150	*58*	2	100	95	*69*	.....	*38*	5	*10*	100	....	57
Beginning balance	503	1,147	2,946	27	*1,000*	*725*	Acc. *12* Tax *100*	200	2,986	L 50 B 420 E 765	B *105* E *218*	*500*	*2,500*	898
Ending balance	245	1,297	2,888	29	*900*	*630*	Acc. *73* Tax *108*	200	2,948	L 50 B 420 E 770	B *107* E *226*	*400*	*2,500*	955

The above figures are not in any sense indicative of the business of Thomas A. Edison, Inc., or any of its constituent companies, but are purely for the purposes of this article.

FIGURE 4A. BALANCE-SHEET-PROFIT-AND-LOSS STATEMENT

Blank Manufacturing Company
Comparative Balance Sheet

	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.
Cash								245	503			
Notes Receivable								250	185			
Accounts Receivable								1,047	962			
Raw Material								868	826			
Merchandise in Process								800	900			
Finished Stock								1,220	1,220			
Deferred Charges								29	27			
								4,459	4,623			
Notes Payable, Banks								900	1,000			
Accounts Payable								630	725			
Accruals								73	12			
Income Tax Reserve								108	100			
								1,711	1,837			
Working Capital								2,748	2,786			
Investments								200	200			
Total Working Capital								2,948	2,986			
Land								50	50			
Buildings								420	420			
Reserve								*107*	*105*			
Equipment								770	765			
Reserve								*226*	*218*			
Total Plant								907	912			
Bonds								400	500			
Total Capital								3,455	3,398			
Capital:												
Capital Stock Preferred								1,000	1,000			
Capital Stock Common								1,500	1,500			
Surplus								955	898			
								3,455	3,398			

Figure 4b. Comparative Balance Sheet

amount of income accrued is charged to Deferred Charges account and Working Capital and credited to Surplus account.

Pay-roll. The amount of factory pay-roll accrued, both direct and indirect labor, being part of the product, is charged to Inventory account, while the Administrative and Selling pay-roll is charged to Surplus account and credited to Working Capital. The total pay-roll is credited to Accruals.

Income Tax Reserve. The amount of accrued income tax for the month is entered here.

Plant Reserves. That portion of the reserves for depreciation of buildings, and equipment covering factory operations is charged to Inventory account, the balance being charged to Surplus. These amounts can be closely estimated due to their constant recurrence.

Miscellaneous. Miscellaneous journal transfers cover the monthly amortization of prepaid insurance and interest charges, accruals for royalties, commissions, etc., and any other items not specified above.

A total of the columns of the Balance-Sheet-Profit-and-Loss Statement indicates the forecasted changes in the assets and liabilities for the period.

For balance sheet purposes it will be found necessary to segregate items forecasted in totals, such as receivables, inventory, etc.

By posting the balance sheet items as at the beginning of the month and adding the total monthly fluctuation as developed by the Balance-Sheet-Profit-and-Loss Statement, the forecasted result is obtained in a comparative form with the differences noted.

Co-ordination of Individual Forecasts as a Means of Correcting Lack of Balanced Operations. Obviously there should be agreement between the sales manager's schedule of sales, the factory manager's schedule of manufacturing, the purchases, collections, etc. In spite of co-operative meetings and conferences of department heads, however, differences are apt to disclose themselves which are readily apparent when the figures are co-ordinated in the Balance-Sheet-Profit-and-Loss Statement. The correction of these discrepancies naturally follows, and is another means of executive control.

Daily Financial Closing. Presumably business managers have often said to themselves—"If I only knew how I was coming out from day to day, how much better off I would be as compared with waiting so long before receiving my statements; that is, if I could close daily like a bank."

While the Edison Industries have not found it necessary to use the daily financial closing, it is entirely feasible to do so with the Balance-Sheet-Profit-and-Loss Statement. In the Edison Industries the forecasting of the conditions of the business at the end of the current month is made three times; first, on the tenth, revised on the twentieth, and again revised on the last day of the month. In times of rapid rise or fall in prices, overnight changes in business condition, a special forecast is prepared, so that the effect on the Edison business is immediately determined.

Keeping Banks Advised on the First of the Month. If there is one thing which pleases the officers of a creditor bank, it must be to know that the enterprise to which it may have loaned money is in daily touch with its business. A tangible evidence of this is where the bank received a balance sheet in the incoming mail on the first of the month showing the forecasted condition as at the close of business the day previous.

(*Article II—"Cash Conservation by Means of the Budget" will appear in the November number of Administration.*)

EXPENSE BUDGETS FOR DEPARTMENT STORES

BY J. P. FRIEDMAN *

FOR a great number of years retail businesses, like other enterprises, were content to determine their profits at the end of each year and to appraise these in the light of past experience. Later, it was found advantageous to calculate profits more frequently—semiannually, quarterly, or monthly. For this purpose perpetual inventory records were evolved, making it possible to prepare operating statements without the tremendous amount of labor entailed in taking physical inventories. Still, however, the results were known only at the end of the period, when it was too late to do anything to correct or adjust unfavorable developments.

Gradually, the idea developed of *planning* the profits. Since they were known to depend chiefly on volume, the predetermination of sales for each department was commenced, on the basis of past experience, of course, but in the light of existing conditions. It became possible to compare performance with plans for the same period, instead of with past periods during which different conditions may have existed. Knowing the approximate average percentage which each department customarily earned on its sales, what is usually known as the gross profit could be forecast with some degree of accuracy, the correctness depending principally, of course, upon the care with which all factors were taken into account in estimating the sales and determining the departmental percentages.

But the predetermination of the *gross* profits alone is not satisfactory, because it is not in the *gross* profits that the officers and directors are so much interested. The matter uppermost in their minds is the maintenance of a satisfactory rate of *net* profit, or the increase of that rate. Two elements enter into this, as is well known, the gross profits or realized markings being the first, and expenses the second. In the present period—and probably for some time to come—the selling prices, and consequently the realized percentages of markings or gross profits, are governed to a great extent by competition and therefore these percentages are likely to be much smaller than during the war years or even the pre-war years. While these realized percentages of markings or gross profits cannot be controlled, however, the other element entering into net profit—the expenses element—is not governed by competition in the same way, and savings in this group will just as certainly increase the net profits as if an increased retail price could be charged. Expense budgets, therefore, prepared in a manner similar to merchandise budgets—on the basis of past experience, but in the light of present conditions—will make it possible to plan *net* profits. In doing this, both elements will be considered at the same time, and one will not be allowed to be unduly increased, irrespective of the other. The business will be considered as an entity, as it should be, and only such policies carried out as will yield satisfactory *net* profits.

These facts are so clear that it does not appear necessary to justify ex-

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pense budgets. Their adoption or contemplated introduction by a large proportion of far-sighted retailers throughout the country is testimony of their value to the management.

A few remarks on the introduction of the expense budget may be pertinent here. Anyone who has installed a new system or introduced any innovation can recall how difficult it was to put it through, how any number of people could be found who would state that it would not work, and how, after considerable time, the idea was carried through. It *did* work, possibly after some modification, but the main idea remained intact. The experience with the expense budget will be the same. It is a far bigger proposition than many of the innovations which are introduced, and it will require a great deal of painstaking application, and also time—a long time, probably several years—before the people handling it are thoroughly familiar with it, and before the fullest results can be expected. This does not mean that some benefits will not be apparent immediately, but at the beginning it will be only a small part of what may ultimately be expected. So it should be understood now, that time is of the essence and that it is not possible to reap golden rewards merely by adopting a system which may be called an expense budget, unless there is the willingness to stay with it and watch it develop, or grow, step by step, until it reaches its fullest measure of usefulness.

II

Before the introduction of an expense budget can be commenced, three preliminary conditions must be met, as follows:

1. It is necessary to have a dependable detailed classification of expense accounts which has been used to record expenses for the past year, or preferably number of years.

If such a classification is not in use, one should be adopted. That contained in the Standard Method of Accounting for Retail Stores prepared by the Controllers' Congress and the Accounting Committee of the National Retail Dry Goods Associations is particularly recommended for this purpose. It is excellently devised, so that whether a store is small or large, one of the four classifications which are provided will be found in every way suitable.

2. It is necessary to have a well-planned merchandise budget, with all it implies—estimated sales, purchases, and inventories.

This is very important, because only by knowing the planned sales can salaries, advertising, supplies, and most of the other expenses be estimated.

3. Some method of keeping perpetual inventories should be in use, so that monthly operating statements can be prepared and the net profits determined as the year progresses, instead of proceeding blindly until the end of the year.

This is not imperative but is highly desirable. The "Retail Method" is recommended for this purpose. It is in use in a great number of the largest and most progressive stores and has been found reliable. Further, it has the approval of the Treasury Department. Article 1588 of Regulation 62 issued under the Revenue Act of 1921 describes it as follows:

> Under this method the goods in the inventory are ordinarily priced at selling prices, and the total retail value of the goods in each department or of each class of goods is reduced to approximate cost by deducting the percentage which represents the difference between retail selling value and the purchase price. This percentage

is determined by departments of a store or by classes of goods, and should represent as accurately as may be the amounts added to the cost prices of the goods to cover selling and other expenses of doing business and for the margin of profit. In computing the percentage above mentioned, proper adjustment should be made for all mark-ups and mark-downs.

III

Since the Standard Method of Accounting for Retail Stores has been published only recently and many are not familiar with it, a brief summary of those portions dealing with expense classification may perhaps be helpful.

All expenses of a business are divided first into 14 natural divisions, and each of these in turn into 5 functional groupings. For the most part the natural divisions appear in each of the functional groupings, though there are some exceptions. For example, "Salaries and Wages," "Supplies," and "Traveling" are shown under each of the five groupings, while "Rentals," "Advertising," and "Taxes" appear in only a few of them. Chart No. 8 of the Standard Method of Accounting for Retail Stores showing "the natural divisions of expense as they appear in the five (5) functional group classifications" is shown in Figure 1. By the use of this classification, totals may be obtained both by natural subdivisions and by functional groupings.

The primary subdivision of expenses shown in Chart No. 8 is for the use of the smallest stores, known as Class A. For larger stores—classes B and C—more elaborate subdivisions have been provided. For example, in the selling group of expenses, Class A stores have 25 accounts, Class B, 63, Class C, 106, while Class D stores, the largest (not provided for in the printed classification of selling expenses) can increase this to any desired number. A store may of course use, let us say, the Class B classification for most expenses, and where more detail is required for a number of items, adopt the Class C classification in these cases. As an illustration of the manner in which these expenses are expanded for the various sized stores, Chart No. 12—The Publicity Division—is shown in Figure 2.

A great advantage of the Standard Method lies in the fact that comparisons can be made with other stores throughout the country using the method. Small stores can compare with large ones and vice versa. A large number of stores are now adopting the method.

IV

Under present conditions, the budget should be prepared for a period of about three months in advance, by monthly periods. Ultimately, it should be the aim to plan ahead for a whole season or perhaps even for a year, but the shorter period will be found to be more satisfactory at first.

The expenses can be best estimated by using as a guide the detailed records of expenses for the past two or three years, as well as, of course, the planned sales. It should be remembered that the amounts of expenses are not to be considered so much as the percentage of expenses to sales. A great decrease in sales will bring decreased expenses, but will these decreases be in proportion to sales? The general tendency is for expenses not to increase relatively as fast as sales, but on the other hand, neither do they customarily decrease relatively as fast. Since the present period is one during which prices will probably continue to fall and sales to decrease, with expenses also falling but not as fast relatively as sales, the

CHART NO. 8

CHART OF THE NATURAL DIVISIONS OF EXPENSE AS THEY APPEAR IN THE FIVE (5) FUNCTIONAL GROUP CLASSIFICATIONS

NATURAL DIVISIONS		FUNCTIONAL GROUP CLASSIFICATIONS				
		-A-	-O-	-P-	-B-	-S-
NO.	NAME	ADMINISTRATIVE	OCCUPANCY	PUBLICITY	BUYING	SELLING
01	SALARIES AND WAGES	01	01	01	01	01
02	RENTALS	—	02	02	02	02
03	ADVERTISING	—	—	03	—	—
04	TAXES	04	04	—	04	—
05	INTEREST	05	05	—	—	—
06	SUPPLIES	06	06	06	06	06
07	SERVICE PURCHASED	—	07	—	—	07
08	UNCLASSIFIED	08	08	08	08	08
09	TRAVELING	09	09	09	09	09
10	COMMUNICATION	10	10	10	10	10
11	REPAIRS	11	11	—	—	11
12	INSURANCE	12	12	12	12	12
13	DEPRECIATION	13	13	—	—	13
14	PROFESSIONAL SERVICES	14	14	14	—	14

Figure 1. Chart Showing Natural Divisions of Expense as They Appear in Five Functioning Group Classifications

position of a business will soon become embarrassing if this tendency is not counteracted by judicious planning. Unless this is done, it will not take long for the small percentage on which the average retailer conducts his business to disappear.

As just stated, the tendency of expenses is not to increase or decrease relatively as fast as sales. Why is this so? Because certain types of expenditures remain almost constant, irrespective of whether business is brisk or slow. As an illustration the Occupancy group of expenses can be considered. Rent, taxes, interest on mortgage, insurance, heat, light and power, and depreciation will remain the same. In the Administrative group practically all items will remain constant. Buying expenses will change only in a negligible degree. Depreciation of delivery equipment and store fixtures will remain the same. Repairs will not be materially affected. Even salaries of departmental subheads and of some department heads will not change. When items of the type enumerated are summarized, it will be found that they represent a considerable portion of the total. Like interest on the war debt and pensions in the United States budget, they represent a class not subject to executive control. These facts should constantly be borne in mind. They bring out even more forcibly the necessity for close scrutiny of the controllable expenses and for their constant comparison with predetermined figures.

V

The actual preparation of the budget will involve a great deal of work, but, for the most part, will not be difficult. Each department, both selling and non-selling, is to be provided with a sheet showing all its expenses for the corresponding periods of the previous year, by months (if the Standard Method of Accounting for Retail Stores is used, as set forth in Charts 10 to 14),[1] and showing in addition, for selling departments, the planned sales, purchases, inventories, and gross profits for each of the months under consideration. The sales department heads are to fill in the proposed direct departmental expenses by months—these may be found by referring to Chart 15 of the Standard Classification—while the non-selling department heads are to do the same. They are then to forward these sheets for approval to a committee appointed for that purpose.

This committee should be small, so as to get quick action. Probably three would be ideal, the controller acting as chairman.

The committee, working under the direction of the heads of the business is to review all the estimates, consult with the various department heads, if any questionable items appear, have authority to make any necessary changes, prorate the expenses of the non-selling departments to selling departments on the bases described later, determine the planned net profit of each department by deducting from the proposed gross profit the sum of the estimated direct and prorated share of indirect expenses, summarize them all, the total being the budget for the entire store. These figures should then be adhered to, important changes found necessary at a later date being submitted to the executives.

This committee must constantly bear in mind that the reduction of expenses must not be allowed to become an end in itself. It is rather a means to an end—that of earning

[1] Chart 12 is shown in Figure 2; the other charts referred to are not shown in connection with the present article.

CHART NO. 19

CHART OF EXPENSE ACCOUNTS—PUBLICITY DIVISION

CLASS "A" STORES

DEPARTMENT	DIVISION NO.	DIVISION NAME
-51- ADVERTISING	01 - 20	SALARIES AND WAGES - MANAGERS AND ASSISTANTS
	02 - 1	RENTALS
	03 - 1	ADVERTISING - NEWSPAPERS
	03 - 99	DO - SUNDRY
	06 -	SUPPLIES
	08	UNCLASSIFIED
	09	TRAVELING
	10	COMMUNICATION
	12	INSURANCE
	14	PROFESSIONAL SERVICES

CLASS "B" STORES

DEPARTMENT	DIVISION NO.	DIVISION NAME
-52- ADVERTISING	01 - 20	SALARIES AND WAGES - MANAGERS AND ASSISTANTS
	01 - 21	DO - ARTISTS AND COPYWRITERS
	01 - 22	DO - SIGN WRITERS
	01 - 93	BONUSES
	01 - 95	SUPPERS
	03 - 1	ADVERTISING - NEWSPAPERS
	03 - 3	DO - PERIODICALS AND PROGRAMS
	03 - 4	DO - STREET CARS
	03 - 5	DO - BILL BOARDS
	03 - 6	DO - CATALOGS
	03 - 7	DO - CIRCULARS
	03 - 99	DO - SUNDRY
	06 - 1	SUPPLIES - STATIONERY AND OFFICE
	06 - 15	DO - DRAWINGS, ELECTROTYPES, ETC.
	06 - 16	DO - MAT SERVICE
	06 - 17	DO - SIGN WRITERS
	06 - 19	DO - PUBLICATION SUBSCRIPTIONS
	08 - 2	UNCLASSIFIED - MEMBERSHIP AND DUES
	08 - 5	DO - ENTERTAINMENT
	09 - 99	TRAVELING - SUNDRY
	10 - 2	COMMUNICATION - TELEPHONE TOLLS
	10 - 3	DO - TELEGRAMS
	10 - 5	DO - POSTAGE
	14	PROFESSIONAL SERVICES
-58- DISPLAY	01 - 20	SALARIES AND WAGES - MANAGERS AND ASSISTANTS
	01 - 93	BONUSES
	01 - 96	SUPPERS
	02 - 1	RENTALS
	06 - 1	SUPPLIES - STATIONERY AND OFFICE
	06 - 18	DO - DECORATING MATERIAL
	06 - 19	DO - PUBLICATION SUBSCRIPTIONS
	08 - 2	UNCLASSIFIED - MEMBERSHIPS AND DUES
	09 - 99	TRAVELING - SUNDRY
	10 - 2	COMMUNICATION - TELEPHONE TOLLS
	10 - 3	DO - TELEGRAMS
	12 - 11	INSURANCE - PLATE GLASS
	12 - 12	DO - BURGLARY

CLASS "C" STORES

DEPARTMENT	DIVISION NO.	DIVISION NAME
-53- GENERAL ADVERTISING	01 - 20	SALARIES AND WAGES - MANAGERS AND ASSISTANTS
	01 - 21	DO - ARTISTS, COPYWRITERS, ETC.
	01 - 22	DO - SIGN WRITERS
	01 - 93	BONUSES
	01 - 96	SUPPERS
	03 - 1	ADVERTISING - NEWSPAPERS
	03 - 3	DO - PERIODICALS AND PROGRAMS
	03 - 4	DO - STREET CARS
	03 - 5	DO - BILL BOARDS
	03 - 8	DO - NOVELTIES
	03 - 9	DO - DISPLAY, PRIZES, ETC.
	03 - 10	DO - BASEBALL TEAM
	03 - 99	DO - SUNDRY
	06 - 1	SUPPLIES - STATIONERY AND OFFICE
	06 - 15	DO - DRAWINGS, ELECTROTYPES, ETC.
	06 - 16	DO - MAT SERVICE
	06 - 17	DO - SIGN WRITERS
	06 - 19	DO - PUBLICATION SUBSCRIPTIONS
	08 - 2	UNCLASSIFIED - MEMBERSHIPS AND DUES
	08 - 5	DO - ENTERTAINMENT
	09 - 99	TRAVELING - SUNDRY
	10 - 2	COMMUNICATION - TELEPHONE TOLLS
	10 - 3	DO - TELEGRAMS
	10 - 5	DO - POSTAGE
	14 - 7	PROFESSIONAL SERVICES - ADVERTISING
-54- CIRCULAR ADVERTISING	01 - 20	SALARIES AND WAGES - MANAGERS AND ASSISTANTS
	01 - 2	DO - CLERICAL
	01 - 93	BONUSES
	01 - 96	SUPPERS
	03 - 6	ADVERTISING - CATALOGS
	03 - 7	DO - CIRCULAR
	03 - 99	DO - SUNDRY
	06 - 1	SUPPLIES - STATIONERY AND OFFICE
	06 - 19	DO - PUBLICATION SUBSCRIPTIONS
	08 - 19	UNCLASSIFIED - MAILING LISTS
	09 - 99	TRAVELING - SUNDRY
	10 - 5	COMMUNICATION - POSTAGE
	14 - 7	PROFESSIONAL SERVICES - ADVERTISING
-56- WINDOWS	01 - 20	SALARIES AND WAGES - MANAGERS AND ASSISTANTS
	01 - 93	BONUSES
	01 - 95	SUPPERS
	02 - 1	RENTALS
	06 - 1	SUPPLIES - STATIONERY AND OFFICE
	06 - 18	DO - DECORATING MATERIAL
	06 - 19	DO - PUBLICATION SUBSCRIPTIONS
	08 - 2	UNCLASSIFIED - MEMBERSHIPS AND DUES
	09 - 99	TRAVELING - SUNDRY
	10 - 2	COMMUNICATION - TELEPHONE TOLLS
	10 - 3	DO - TELEGRAMS
	12 - 11	INSURANCE - PLATE GLASS
	12 - 12	DO - BURGLARY
-57- INTERIOR DECORATION	01 - 20	SALARIES AND WAGES - MANAGERS AND ASSISTANTS
	01 - 93	BONUSES
	01 - 96	SUPPERS
	06 - 18	SUPPLIES - DECORATING MATERIAL
	09 - 99	TRAVELING - SUNDRY
	10 - 3	COMMUNICATION - TELEGRAMS

FIGURE 2. CHART SHOWING THE MANNER IN WHICH THESE EXPENSES ARE EXPANDED FOR THE VARIOUS SIZED STORES

profits. A reduction of expenses if services or sales will suffer should not be allowed. Service, sales, and expenses must always be considered at one and the same time.

A great deal has been written and said regarding the prorating of expenses of the non-selling departments to the selling departments in retail stores. The committees of the National Retail Dry Goods Association devoted considerable time to discussions of this subject. In Chart No. 18, of the Standard Method of Accounting for Retail Stores their suggestions as to the best methods to be adopted for this purpose are set forth. These suggestions will be found practical on the whole, and satisfactory. Some difference of opinion may perhaps exist as to whether some of the items might not have been more equitably prorated on a different basis. It should be remembered, however, that the decisions represented the consensus of opinion of the committees. The great benefits from standardization including the facility of comparisons with other stores should not be overlooked.

For Class A stores, four bases of proration are provided, namely: (1) Volume of sales; (2) Volume of cost purchases; (3) Value of space occupied; (4) Space used.

For Class D stores, five additional ones are given, as follows: (1) Average stock; (2) Packages delivered and returned; (3) Value of equipment used; (4) Total transactions; (5) Charge transactions.

VI

A number of important questions will arise in the preparation of the budget. The estimates for salaries and wages, rentals, advertising, taxes (except income taxes), interest, service purchased, traveling, communication, insurance, depreciation, professional services and even for unclassified expense will not be difficult.

The greatest obstacles will be met in the consideration of supplies and repairs, particularly in large stores that have their own maintenance departments. In order properly to arrive at the actual monthly charge for these expenses, it has been suggested that a perpetual inventory of supplies be introduced and that a sort of cost system be installed for the maintenance department. To carry this out in its entirety would involve a tremendous amount of work and it does not seem that the results to be obtained justify the expense.

The idea can, however, be applied in a modified form. Physical inventories are usually taken semiannually or annually of such supplies as packing materials, delivery repair materials, and stationery, in that way determining the consumption. On the basis of past experience, the consumption for the period under consideration can be estimated and the proportion for each month found on the basis of a percentage of the sales. Irrespective of the purchases, then, the consumption can be taken at the estimated figures, the inventory increasing or decreasing by the difference between purchases and consumption. This will, of course, mean that a difference between proposed and actual supplies used will not be shown until an inventory is taken, but when that time comes, it will be found that the exact figures would not have been materially different from those estimated. It is just another case where precision must yield to practicability.

With regard to the maintenance department labor, some sort of time records should be kept, possibly only by hours, all hours being extended at a uniform rate, which should be high

enough to absorb labor as well as departmental supervision and overhead. It is not advisable to attempt a perpetual inventory of repair materials and supplies, but rather, the head of the maintenance department should estimate the amount entering into each job. It is apparent that this would not be exact, but again the difference would be found negligible.

VII

So much for the preparation of the budget and the difficulties encountered in its preparation. The problems that will be met in the successful operation of the plan will now be examined.

To accomplish this, the first requisite is to obtain the support of everybody within the organization; for no matter how good the plan, no matter how advantageous, it will fail, unless the people within the business are convinced that it is to their best interests and to that of the organization. If this is not done they will try to discredit it. They may do this by overemphasizing petty flaws—and we know that all plans have these at the beginning; they may try to hold up maintenance work that is really needed in order to reduce expenses—a false reduction, since good service to customers is of paramount importance and must not be allowed to suffer; they may try to have expenses deferred or recorded as capital expenditures; in fact there is hardly a limit to the things they may attempt to do to bring about the abandonment of the new plan and the return to the old hit-and-miss methods. And they may really feel that they are performing a service in trying to save what to them may appear as the useless expense of maintaining a budget system. The work must be done in co-operation with the heads of the departments, always with the thought of selling the plan to them. They will soon see its advantages, for unquestionably they far outweigh the only disadvantage involved—which is the temporary additional cost.

The heads of departments must be fully informed at all times as to what is taking place so far as concerns their own departments. Not only should they have a voice in the preparation of the budget, but they must also receive monthly reports showing how the actual figures compare with those estimated. Such a report could well take the form of a three-column statement showing the actual expenses of the current month compared with those planned, as well as with the actual ones of the same month last year. It can further be elaborated by the addition of similar information as to the cumulative figures for the year to date. The latter will be particularly interesting.

Further, the heads of the organization should take the same interest in discussing the results with their department heads as they now take in going over the merchandise budget, the realized percentages of markings, inventories, and prior stock; they should take the opportunity to commend a particularly good showing or to understand why expenses were higher than contemplated, and should use the information for future guidance. They should by their actions show that the saving of expense is of very great importance in their minds and in this way put the organization behind the plan.

In conclusion, it may be said that in the preceding presentation details have been avoided as far as possible, since these are very voluminous and not essential to the explanation of the subject. They are, to a great extent, obvious.

THE ST. LAWRENCE-GREAT LAKES SHIP CANAL

BY R. W. WISHART*

CERTAIN organizations in the United States are agitating for the development of our inland waterways, including the St. Lawrence River (the latter in co-operation with the Dominion of Canada) as a means of cheapening transportation and relieving congestion on our railways and at terminals. The proposition of which the development of the St. Lawrence forms a part is generally known as the St. Lawrence-Great Lakes Ship Canal. It is proposed that the government of the United States and the Dominion government co-operate in the development of water power from the St. Lawrence River and in the construction of a ship canal to connect the Great Lakes with the Atlantic Ocean, the revenue from the water power to act as a substantial subsidy for the ship canal. Just what connection there is between a water-power development and a ship canal, how one supplements the other, or why the need for one should imply the need for the other is not clear.

Surveys have been made by the joint governments and the engineers report that the canal can be built at a cost of a vast number of millions of dollars, the exact amount being in dispute, but all are agreed that the bill will be considerable, and that it will have to come out of the pockets of the taxpayers. This has given rise to an acrimonious debate between Governor Miller of New York and Governor Allen of Kansas. New York, being a richer and more thickly populated state than Kansas, will have to bear a larger part of the cost, with a corresponding increase in taxation and an indirect tax in perpetuity through the increased cost of a necessary staple commodity, as will be shown later. This appears to the New Yorkers and other non-producers of cereals as unjust. The New Yorkers have taxed themselves to pay for the enlargement and extension of the Erie Canal, now known as the New York State Barge Canal, which from a traffic standpoint has not, to date, proved that the investment was justified. This canal was enlarged primarily to handle the same traffic that is intended for the St. Lawrence route. Sober judgment would dictate that the first experiment justify itself before another is undertaken.

The argument of the two governors has strayed from the question of whether there is actually any need for a canal and whether its construction can be justified economically or financially. The fact that a large volume of traffic, originating in the middle western and lake states and aggregating hundreds of millions of tons, moves to Europe each year, does not imply a profitable traffic for a ship canal. In this country it is, the writer believes, impossible for such a canal to attract any great amount of tonnage—as it must do to justify the expenditure. This belief is based on the theory that traffic seeks the cheapest transportation, and that the proposed canal will not furnish the cheapest transportation.

The failure of the New York State Barge Canal, even during periods of traffic derangements, due to strikes and other causes, is standing proof that the building of an additional canal would

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be unwise, economically unsound, and a tremendous additional burden on the already overburdened taxpayer, for which he would get no commensurate return. *If the canal is not going to be used after it is built, it should not be built.* Whether or not it will be used can be determined with reasonable accuracy in advance by an examination of the traffic and operating factors involved and of certain fundamentals of transportation which a study of the history and economics of transportation will give us.

II

It may be taken as axiomatic that restricted inland waterways cannot compete with railways for traffic, regardless of elaborate arguments to show that they can. Anything can be proved logically if the premise on which it is based be admitted; thus the advocates of this scheme have developed a plausible and convincing argument in its favor. History, however, shows us that, as stated, restricted inland waterways cannot compete with railways for traffic. There is not a single instance in the history of transportation to prove that they can, while there is abundant and overwhelming proof to the contrary. The proponents of this scheme cite the Panama Canal and the Manchester Ship Canal as proof that such a canal as proposed would be profitable, but aside from the physical characteristics of canals, there is no analogy in the comparison. The Panama Canal, in length approximately fifty miles, connects two large bodies of water and saves ocean-going vessels thousands of miles of steaming and brings large consuming markets closer to us than to our competitors; the Manchester canal is very short and leads into the heart of industrial England, probably the greatest concentration of manufacturing industries in the world. The proposed canal does neither of these things; it merely opens up another route for a low-grade commodity, which cannot be moved economically except in combination with manufactured articles, which are not available in the territory tapped. The canals of Europe are cited as additional proof in support of the scheme, but again the differences in distance, density of population and in the industrial organizations renders the comparison inaccurate and deceptive. Quantity production, quick turnover and reduction of storage time have reached their highest development in the United States. The greater trainload and faster time of our fast freight trains have been contributory elements in this process. The physical characteristics of our country dictate the location of our industries, which in turn inexorably control the densities of population and of the consuming power. These factors govern our traffic conditions, and any fundamental change in our system of transportation is doomed to failure which is based on a theoretical comparison with some other country and not upon the actual conditions in our own country.

One writer, supporting the proposed canal, asserts that ocean vessels will penetrate as far as possible into the interior for cargo. An examination of facts does not support this statement. Steamers can go above New Orleans in the Mississippi and above New York in the Hudson, yet they do not often do so. The River Platte is navigable far above the points where steamers ordinarily discharge and take on cargo. They do not voluntarily go above these points, and when they are compelled to do so they exact a corresponding premium for the extra steaming and extra risk. It is true that where no other transportation is to be had

steamers will penetrate thousands of miles into the interior, as they do on the Amazon River, *but always at a premium*. There is no reason to assume that they would be reluctant to go into the interior or to charge this premium when they do so if there were not some very excellent reason for so doing.

III

The capital of Colombia (Bogotá) is reached by river steamers operating on the Magdalena River, yet there is active and persistent agitation for railways to connect the interior with the coast and the outside world. If there were not something connected with railway transportation that renders it more desirable than inland waterway transportation this agitation would not exist. The Mississippi and Missouri Rivers were at one time for thousands of miles the great channels of commerce, serving a vast territory. With the advent of the railways they gradually fell into disuse. Why? The answer lies in that fundamental principle of transportation that commerce seeks the cheapest and most efficient service, just as water seeks its level. China is a country with abundant facilities for water transportation, yet we are told that the regeneration of China depends on the construction of an adequate railway system. These facts furnish incontrovertible proof that restricted inland waterways cannot compete with railways. It is significant that no competent transportation man has endorsed the proposed canal. Its advocates, no matter how high their standing as engineers, editors, or merchants, are amateurs in transportation. The writer is confident that it is not possible to find a group of competent economists, transportation experts, or bankers to endorse the project.

IV

Let us examine some of the traffic and operating problems to be considered. Ocean-going steamers are operated:

1. As line steamers, running on regular schedules between regular ports of call.
2. As tramps, with no fixed routes, seeking ports where cargo is obtainable according to the season or period of demand, the effort being constantly made to reduce the distance steamed in ballast (without cargo) to a minimum.

Thus, if two or more cargoes are offered to such a ship, the ship will take the one to the port which offers the best opportunity for providing an additional cargo, or exact a premium for taking the greater risk on the other. Steamers of this kind are usually fixed (chartered) for one or more trips or upon time charter. In the first case the rate is usually fixed at so much per ton, per case or other unit, depending on the custom of the trade, and in the latter case the rental is usually by the month, payable in advance, the owner standing certain of the operating expenses and the charterer the other expenses.

Line steamer operation calls for permanent organizations at the several ports of call. The tramp steamer is usually fixed through brokers, who receive as remuneration a percentage of the rental paid to the owner. Obviously, line steamers are eliminated from the St. Lawrence-Great Lakes route, as no company could afford to maintain a permanent organization for only two or three trips a year (the maximum season of navigation on the proposed route being 220 days per year), nor to disorganize its regular line service. The aim of all companies is to contract for a year or more for the transportation of basic cargo, i.e., cargo without which the vessels cannot stay in the trade. All trades have

basic cargo, in some cases packing-house products, case oil, automobiles, or agricultural implements, etc., depending on the nature of the industrial activities of the different countries which they serve. To secure and hold such contracts there must be no interruption of service.

This leaves us the tramp steamer. The proponents of the canal show by elaborate calculations that Duluth by the proposed route is only 886 miles farther from Liverpool than New York, and attempt to prove, under conditions which they assume to exist, that vessels *could* and *would* go to Duluth for grain at a rate only slightly in excess of the North Atlantic Range-Liverpool rate, saving the farmer almost the entire cost of shipping his grain from the interior to seaboard. This argument assumes that the tramp would go direct from Liverpool to Duluth, Milwaukee or Chicago with two or three thousand tons of cargo. Just what this cargo is to consist of, where or how it originates, and what disposition is to be made of it at destination, is rather vague. Anyone with experience in the North Atlantic trade would view with dismay the task of securing such a cargo. This is assuming one vessel, but if the canal is to justify itself a tremendous tonnage must pass through it, which would mean the multiplication of two or three thousand tons by the number of vessels required to lift the grain crop.

As the eastbound tonnage on the Great Lakes at present is five times greater than the westbound movement (including coal) it will be seen that the lakes territory cannot absorb enough of domestic manufactured articles to give lake steamers return cargoes. What basis is there for assuming that this same territory can provide a demand for enough goods of British manufacture to provide return cargoes from Liverpool, especially as at the present time Congress is engaged in passing a prohibitive tariff bill? As a practical operation the vessel would have to steam from Liverpool to Duluth (3,936 nautical miles) in ballast. A steamer when in port or steaming in ballast is not making any money. Thus, it will be seen that a steamer on this run would be earning money only on her way from Duluth to Liverpool, and would be losing money while in the ports of Duluth and Liverpool and on her return trip. Such a run could be made to pay only under the most extraordinary circumstances and at exorbitant rates.

As the matter would probably work out in practice the owner of such a vessel in Liverpool, we will say, at the time of receiving the offer of such a charter for his vessel, would prefer to go to Barry Roads to load coal for Antofagasta, Chile, and there load nitrate for New York or some other North Atlantic port, as this would not require any steaming in ballast and his steamer would be earning money all the time. The steamer is now in New York, but is still some three thousand miles from Duluth. If he again receives an offer to take a cargo of grain from Duluth to Liverpool he will consider the offer in the light of other offers he may have. Duluth will be bidding not only against other ports with grain to ship, but against every other bulk commodity which the other ports may have to offer. Portland, Baltimore, New York, Hampton Roads, Savannah, Montreal, will also have bulk cargoes for shipment. The vessel owner, not being a philanthropist, will accept the one which gives him the greater profit. He may receive an offer to take a full cargo of sugar for Italy, a full cargo of cotton to Liverpool or Hamburg, a cargo of case oil to the Far East or

any one of hundreds of similar offers. Whether he sends his vessel to Duluth will be determined by the rate in comparison with the other rates offered, always with the understanding that he must send his steamer to Duluth in ballast and that the Duluth rate will have to be enough higher than the North Atlantic Range rate to cover the extra expense. The Duluth rate will be determined by the North Atlantic Range rate prevailing at the time, *plus the extra cost of going to Duluth.*

V

It is futile to set up an argument based on an elaborate set of figures giving comparative costs of operation by rail, rail and water, and water, as these factors do not determine the rate, or alone influence the shipper in his choice of route. It must be borne in mind also that the rates are constantly fluctuating according to the demand of steamers for grain. These rates are sometimes abnormally low, as in the case of a steamer needing grain for ballast, and then the through rate from Duluth to Liverpool via the Atlantic seaboard will also be low. If there were any important diversion of grain from North Atlantic ports to other routes, the liners sailing from the North Atlantic to European ports, requiring grain as a complement to their other cargo, would no doubt break the rate to a point where the St. Lawrence route could not compete.

The only alternative to the system now in vogue would be for the grain shippers of the Northwest to invest their own money in ships to carry their cargoes, and these ships would have to earn their carrying charges in a little over half the year and tie up the rest of the time, or go out and compete with other tramps for the balance of their time. That they could do this successfully or economically in a market already glutted with ships is not to be expected.

VI

Elaborate charts have been prepared showing the origin of manufactured articles comprising the bulk of our export trade in these articles, to show that as they originate in areas contiguous to the Great Lakes these articles would be diverted from the Atlantic seaboard to the lake ports and would complement the grain cargoes from these ports. Here again the fallacy that a large volume of traffic guarantees the use of a certain route is apparent. Take the case, for instance, of an automobile manufacturer in Detroit, with a large foreign trade. This trade we will say is divided more or less equally between the ports of Copenhagen, Liverpool, Hamburg, Bordeaux, Buenos Aires, Calcutta, Melbourne, and Shanghai. The manufacturer does not view his shipping problem in the light of one port, but in the light of the whole. He considers the proposition to ship to Liverpool for 220 days on the grain steamers passing his front door, realizing that he has 145 other days in the year when he cannot use this route. His cargo aggregates thousands of tons of the most desirable kind of freight from a ship operator's point of view: it is not a seasonal product; it moves in large quantities at regular intervals. Obviously it is desirable for a ship operator from the seaboard to obtain the business, and he will make some sacrifices to get it. He also operates ships to all ports to which this manufacturer's products go. In order to secure the whole of the business to all of the ports he will make a rate on the total business which will make the manufacturer's

annual freight bill much less than it would be otherwise, even though he might obtain a lower rate for a time on one route.

On the other hand, this same manufacturer knows that if he gives his business to the Duluth-Liverpool steamers for 220 days, he will have to patronize the other route for 145 days, and that the rate he will have to pay for the fewer number of days will be correspondingly higher than if he used the route regularly, so that there might be no actual saving on the annual freight bill, even though the one route offered a low rate. It seems clear that this traffic will continue to move via New York even if the proposed canal is built.

VII

The writer agrees with everything said regarding the breakdown of our railway transportation system, but is diametrically opposed to the conclusions as to the cause, or that the construction of the proposed canal would confer any benefits on either the railways, the shippers, or the public in general. The theory is that a diversion of traffic to the canal will relieve the railways of a burden they are physically unable to carry, principally due to congestion at terminals. About the only thing that would really be accomplished if the grain traffic were diverted to the proposed canal would be to transfer the congestion from one place to another. Some writers assume that a freight car running between Kansas City and Chicago would be five times as efficient as it would be running from Kansas City to New York, and that by keeping it on the first-named run the Kansas wheat crop could be moved five times as quickly, with little necessity for storage.

But, nothing is said about the break in price which such a wholesale dumping on the market would cause. Anyone familiar with Kansas City and Chicago terminal facilities will ask himself by what process of legerdemain those terminals can be made to handle five times their present capacity. The fact is that the terminals named are so taxed at certain periods of the year, under normal conditions, as to make embargoes necessary. Any attempt to handle even a fraction of the suggested increase would absolutely block them.

As many of the lines entering the northwestern lake ports are single track lines, the operating problems involved in handling such an increased traffic will readily suggest themselves. The only remedy would be the double tracking of existing lines and a vast multiplication of terminal facilities, which it is admitted would be of value only a portion of the time. In other words a few months of the year would have to bear the annual burden of these large investments of capital in new tracks, new terminals, new motive-power and rolling stock. Granting that all this can be done with profit to the railways, what of the waterfront loading and discharging facilities for the number of vessels required for such a grain movement? Practically all vessels entering Chicago go up and dock in the Chicago River, a narrow, tortuous stream already taxed to its capacity by lake traffic. The other lake ports have limited waterfront facilities. Steamers going to Duluth must pass through the locks of the St. Lawrence River, the Welland Canal, the St. Claire River, and the Sault Ste. Marie Canal locks. The latter two are already handling a traffic greater than that passing through the Panama Canal or Suez Canal. Could they

handle this proposed enormous increase in traffic without a paralyzing congestion?

VIII

The whole country will be taxed for this scheme if it is carried through. The whole country, therefore, is entitled to know whether it has those elements of soundness which conservative investors look for before investing their money, and to know how its operation will affect their individual pocketbook.

Without admitting that it is possible to successfully operate such a canal, it may be well to speculate on the results of a successful operation.

A factor in the grain trade is the fact that grain prices are made in Liverpool for the whole world, the price in the United States being the price at Liverpool, less freight and insurance. In other words the producer must deliver his grain in Liverpool, and the freight rates from the grain producing areas, the United States, the Argentine, the Black Sea and Canada, must equalize each other, or the shipper must absorb the difference. This determines his profit or loss. This fluctuation also governs the domestic price, and any saving in the freight charges from the wheat fields of the United States to Liverpool means that that amount is tacked onto the price of wheat here.

This statement is supported by one of the leading advocates of the canal, Mr. Julius H. Barnes, president of the United States Chamber of Commerce and former president of the Food Administration Grain Corporation, in an article entitled "The Great Lakes Seaway" in the *Review of Reviews* for August, 1922, in which he says:

> They (the farmers) want that transportation saving of five or six or seven cents per bushel between the lake markets and the consuming markets of Europe, *which govern grain prices at those lake markets by a reduction of transportation cost.*[1] . . . They know that the market price in central markets such as Chicago, maintained thus for considerable portions of the year on a higher price relation than could be afforded if a rail charge were the only means of reaching the ultimate foreign market, *governs also the price of every bushel consumed at home without actual shipment.* They reason thus, and soundly, that any reduction of transportation cost which would place the basic markets of the west in a closer relation with the consuming markets of Europe would affect the price not alone of that portion of their crop which actually moved in export trade, *but the larger proportion of home consumption, which must sell at the same price in competition with that made on the export surplus, thus advanced in relation to the foreign market.* They reason, and I believe soundly, that because this is the working of natural economic law, a reduction of five cents per bushel in transportation expense between the western farm and the European consumer would add that value of five cents to every bushel grown in the territory affected in the radius of the Great Lakes ports.

Or, to put it brutally, the domestic consumer will have to pay five cents a bushel more than he now pays. Mr. Barnes places the income from this price advance at two hundred million dollars annually.

This argument is sound as far as it goes, but that "natural economic law" to which he refers, goes much farther than the point stated in the article. Without admitting that the construction of the proposed canal would bring about such a reduction in transportation cost as assumed, let us grant for the sake of argument that it will do so. We are being constantly reminded by advocates of high tariffs of the competition of the pauper labor of Europe which has a lower living cost.

[1] The italics are the author's.

What would be the effect on manufacturing costs in this country? The proposed scheme would not affect living costs in Europe, but would increase living costs in the United States by $200,000,000 which, coming out of the pockets of non-producers of wheat, would be reflected in higher manufacturing costs, making the disparity between this country and Europe even greater than at present, which the politicians would presumably endeavor to offset by a still higher tariff, sending the domestic cost of living still higher, all for the problematical benefit of only 11,000,000 (the farmers) of our population.

The estimated cost of the canal is $250,000,000. As government estimates are notoriously low and almost always exceeded, it may be assumed that the canal will actually cost between $250,000,000 and $500,000,000, to which should be added the annual tax of $200,000,000, above referred to. Of the 42,000,000 people in gainful occupations in the United States, approximately 11,000,000 are engaged in farming, 1,000,000 in mining, 13-000,000 in manufacturing enterprises, 1,800,000 in transportation, and approximately 15,000,000 in other occupations. If these 31,000,000 people in non-grain producing activities wish to tax themselves to the extent outlined for the benefit of the other 11,000,-000 all well and good, but before they do so they should understand just what they are doing.

It may be argued that the additional $200,000,000 in the pockets of the farmers will set up a chain of wants which will be reflected back to the manufacturing enterprises, and will thus be a good thing for the country as a whole. There is just enough truth in this argument to make it dangerous. It is undoubtedly true that a chain of wants would be created, but a similar, though not identical, chain would be established if the money remained in the hands of the non-producers of grain. Giving the money to the farmers does not create any new wealth, it merely transfers it, and can, therefore, have no effect on the total purchasing and consuming power of the country.

THE SURPLUS OF CORPORATIONS

BY PAUL W. PINKERTON *

I—THE NATURE OF SURPLUS

IF success results from the operations of a corporate business, net profits will be earned. As a rule good financing requires that certain of these profits be left in the business. Any which are so left constitute the "surplus" of the corporation.

Surplus is little else than this—the accumulated undivided profits of the business, or the excess of the assets over the liabilities and capital stock. This surplus is an addition to the proprietors' investment in the corporation.

Theoretically the capital stock accounts of corporations represent the original investment of the stockholders. This is not, however, always true in practice. It would be more correct to say that the capital stock accounts (in the case of a corporation with par value shares) represent the par value of the stock issued.[1] Stock is frequently sold by a corporation at more than its par value—and sometimes at less, though this, if an original issue, involves the purchaser in liability in most, if not all of the states. If its stock is sold by the corporation at a price in excess of the par value, this excess, although really a part of the investment of the stockholders, becomes surplus of the corporation and is not entered in the capital stock accounts.

Looked at from this standpoint, the distinction between the stockholders investment and the surplus seems to be purely an arbitrary one, but it is one which is universally accepted and finds a *raison d'etre* in the statutes prohibiting the impairment of capital. These statutes in the case of corporations with par value shares protect an amount equal to the par value of the stock issued, but do not apply to any excess above par which may have been received for that stock. Such excess, however, while classified as surplus and technically available for payment of dividends is not ordinarily intended for such a purpose, and it is therefore usual and desirable to keep it separate on the books of account, both from that part of the invested capital which may not legally be distributed in dividends, and also from that earned surplus which is the source from which dividends are usually drawn.

For instance, it is customary in the organization of a bank or trust company to sell its stock at a premium sufficient to cover the double liability so frequently imposed by law on the stockholders of such institutions. If, then, the stock is sold at $200 a share, $100 represents the par value of the stock and the stockholders' investment, and $100 is entered in surplus. This surplus is, however, intended specifically to cover the stockholder's liability, and also to provide additional working capital, and is not intended for distribution in dividends.

When one deals in stock of no par value there is no uniformity of practice as to what proceeds from the sale of

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[1] If a capital stock unissued account is used, the above statement is true of the difference between the credit balance of the capital stock account and the debit balance of the capital stock unissued account.

stock are entered as investment and what as surplus, due perhaps to the lack of certainty in many of the states where such issues are permitted as to just what will be considered an impairment of capital. Statutes authorizing no-par-value shares usually place upon them a dollar-value to be used for one purpose or another (as for taxation), and it has often been the habit of accountants in dealing with such shares to treat them as if this dollar-value were a par value. This practice results in showing as surplus any excess received above this assumed par value. It would not be within the scope of this article to present all the arguments for or against this plan, but the best and most commonly accepted practice is to credit the capital stock account of no-par corporations with the entire amount received from sales of capital stock, irrespective of any arbitrary value required for tax or other purposes, and irrespective of differences which may exist between the prices at which various lots are sold, wide though those differences may be.

II

The capital, or net worth of a business is the investment of the proprietors plus the net earnings (or minus the net losses) less the withdrawals of the proprietors. It may also be defined as the difference between the assets and liabilities of the enterprise. The surplus of a corporation is, then, from the first point of view, any excess investment of stockholders in the business above the par value of the stock issued to them, plus the net earnings (or minus losses), less the dividends declared. From the second point of view the surplus is the difference between the corporation's assets on the one hand, and, on the other, the sum of its liabilities and capital stock.

As an example of these two methods of viewing the surplus of a corporation, consider one whose balance sheet in condensed form shows the following condition:

Assets	
Total Assets	$50,000
Liabilities	
Total Liabilities	$30,000
Capital Stock	10,000
Surplus	10,000
	$50,000

The surplus of $10,000 is seen to be the difference between the $50,000 of assets and the sum of the $30,000 of liabilities and the $10,000 of capital stock. This surplus, looked at from the point of view of its source, may perhaps have been derived as follows:

Premium resulting from sale of $5,000 of the capital stock at twice par	$5,000
Profits from business	8,000
	$13,000
Less dividends	3,000
Surplus by balance sheet	$10,000

It is obvious that while the present worth of a corporation is determined by an examination of its balance sheet, its earning power may be determined only by an analysis of the Surplus account to see the sources from which and the conditions under which the surplus has risen. As a large surplus may come on the books from the sale of capital stock at a premium or from an extraordinary and unusual increase in the value of certain assets, the size of the surplus does not in any way indicate the normal earning power.

Conversely, a small surplus does not necessarily mean no earning power, as dividends may have been large and frequent. The past ability of the corporation to earn can best be learned by tracing the history of its surplus, seeing

how it has been created and whether its diminution has been through losses or through dividends.

III

Surplus is, then, merely the amount by which the assets of a corporation have come to exceed its liabilities and its capital stock. It is just as impossible to say that the surplus is represented by any specific assets as it is to say that the capital stock is represented by specific assets or that the liabilities are thus offset.[2]

It is frequently considered sound finance for a corporation which has been able to accumulate a surplus to invest some of its cash in safe, easily-sold securities, as a reserve for contingencies, the securities being available for sale or for use as collateral to secure cash at times when cash may be urgently needed.[3]

But these investments would not constitute or represent the surplus any more than would the cash with which they were bought and which would otherwise, perhaps, have been distributed in dividends. There are two distinct steps in such an operation. First it has been decided not to distribute more than a certain amount, if any, of the earnings, holding the remainder as a more or less permanent addition to the working capital. Second it has been thought wise to invest some of the cash not immediately needed, in such a way that it will earn a return. But it is the surplus cash not needed for immediate purposes, and not the surplus shown by the Surplus account, which is being invested.

It is seldom the case with a corporation having a large surplus that there is sufficient cash in the treasury to pay out as a dividend the entire amount of the surplus. The excess of the assets over the liabilities and capital stock is constantly invested in the corporation's own affairs; it constitutes the increased working capital which it needs to carry a constantly growing amount of accounts receivable and an ever-expanding inventory, or the increased fixed capital tied up in plant enlargements. To speak of the surplus as "surplus funds" is inexact—the surplus is too intangible a thing to be called a "fund."

The surplus is a part of the net worth or capital of the business, as much so as is the capital stock itself.

> It becomes capital, in fact, from day to day as it accumulates, and it decreases from day to day by means of losses or dividends. It becomes capital in theory once a year—but only because of expediency or convenience.[4]

The surplus is so much a part of the capital that the corporation is as fully liable to its stockholders for their aliquot parts of it as of the capital stock. Of course this liability is of a different nature from the liability to outside creditors, which on liquidation must first be met before the stockholders can be entitled to anything, but the liability to stockholders is as binding in regard to the surplus as it is in regard to the original contributions of capital.

IV

The policy of carrying a large surplus naturally accompanies a profitable business. Through the possession of a large surplus a corporation ordi-

[2] Of course to this rule there may be considered to be exceptions for short periods, as, for instance, when the capital stock has been all issued for a plant. In such a case one might justly say that all other assets on the balance sheet, at some later date when there were no liabilities, represented the surplus. But the forced character of the exception tends rather to clarify the rule than to disprove it.

[3] Other forms of property than securities are frequently purchased for this purpose

[4] Montgomery, Robert M., "Auditing, Theory and Practice," Vol. I, p. 279. (1922 edition.)

narily expects not only to be able to withstand dull times as far as outside creditors are concerned, but also to keep its stockholders satisfied by being able to pay dividends out of this accumulated surplus in years when actual losses are sustained or the current earnings are not of themselves sufficient to maintain the usual dividend rate. This is often a vital factor in maintaining the corporation's credit, for if dividends at the usual rates are being paid regularly many persons will not go further in questioning the standing of the company.

In the establishing of a dividend rate, a policy frequently adopted and considered sound is to fix that rate at a figure slightly below the estimated minimum earnings. In this way it is presumably made certain that regular payments of dividends can be made at the established rate. If the expectations are realized, a surplus will be accumulated from the earnings in excess of the dividends, and this surplus can be used for growth or for emergencies. The rapidity of this accumulation is of course dependent on the amount by which the earnings exceed the dividends, and will be greater in a corporation with widely fluctuating earnings (provided the dividend rate was set, as specified, at a figure below the *minimum* earnings) than in a corporation whose earnings are relatively stable.

From the standpoint of finance the practice of establishing a dividend rate on the basis of minimum earnings is sound because the corporation with a fluctuating income needs a stronger safety-valve than the corporation whose profit-rate is stable, for the latter will find the borrowing of money much easier than one whose earnings seem from their variant amounts to be the product of a more or less speculative enterprise. Such a business is beyond the shoals only when its own capital (which includes the surplus) is sufficient to carry it through all emergencies, because in times of pressure it is likely to find the doors of credit closed to it.

V

In the United States, in periods of average prosperity, the accumulation of a surplus is the means by far the most commonly used for securing additional capital with which corporate expansion may be effected. New corporations sell stock; established corporations of course also increase their authorized capitalizations and sell stock, especially preferred, and they make bank loans or float bond issues. But if the money obtained from these means is invested in plant extensions the only way by which the obligations can be met at maturity is through the sale of assets, or of new securities, or the earnings of profits.

In the latter event it may be said that it is through the accumulation of surplus that the new capital was secured. Frequently is it the case that the extensions are made a little at a time directly through the withholding of part of the earnings from dividends and without outside assistance. Because this is done a little at a time, as was said, one does not realize until he analyzes various corporation accounts how true it is that this is by far the most common method of increasing the amount of capital (owned and borrowed) invested in a corporation.

To assure the growth of banks operating under the National Bank Act, it is provided in the law that they shall, every six months, set aside as a permanent addition to the surplus 10 per cent of the net profits of the preceding half-year until the amount thus set aside has reached one-fifth of the par value of the capital stock.

But in not all corporations can additional capital be used to the same advantage as the original capital, and there is a widely-accepted economic theory called the law of diminishing returns, which holds that in every business there is a point beyond which further growth will result in proportionately lessened profits. When this limit is reached, the further accumulation of surplus is of course undesirable, as the stockholders who would receive it as dividends can use it with greater pleasure and in many cases with greater profit.

VI

The practice of accumulating a large surplus has in many instances resulted in a financial condition in which the tail seems to wag the dog, the surplus being much larger than the capital stock. The balance sheets of some of the best-known corporations, for instance, show surpluses running as high as eleven or more times the amount of the capital stock. The Ford Motor Company, for example, with a capital stock of $17,264,500, had on April 30, 1921, a surplus of over $182,000,000. It is usual, when the surplus becomes so disproportionate and it is decided that it will be needed permanently in the business, to equalize the net worth accounts by the declaration of a stock dividend, whereby the amount shown by the books under the caption "surplus" is decreased, and the amount shown as "capital stock" is increased, without the slightest disturbance in the company's cash balance, working capital, investments, or fixed assets.

The issuance of stock dividends is often called the capitalization of surplus. It is resorted to for four main purposes, which are:

1. To satisfy stockholders who clamor for the distribution of a large surplus, when it is felt that the actual distribution in cash would deprive the company of needed capital.
2. To give the stockholders tangible evidence of the increased value of their holdings.
3. To keep the market price of the stock at a satisfactory figure.
4. To conceal an excessive amount of annual earnings by making it possible to declare these earnings at a small rate of dividend on a large amount of stock, rather than at a large rate on a small amount of stock.

VII

Although the surplus of corporations arises generally from earnings, it may result from many other sources, perhaps the chief of which is the sale of stock at a premium as spoken of above. It may also arise from donations to the corporation, or it may be brought about by increasing the book values of the assets above their cost.

A surplus may be reduced in any of the opposite ways: By selling a corporation's own stock below par; by losses whether from operations or casualty or unusual transactions; by writing down the book values of assets; or by distribution of the profits among the stockholders (dividends).

All increases in surplus are credited to Surplus account, and all decreases are debited to it. Since there must be earnings before there can be dividends, the Surplus account, if there is one, shows a credit balance unless instead of a surplus there is a deficit. In the latter case it is sometimes the practice to close the Surplus account and to open another, with a debit balance, called the Deficit account. Other accountants leave the deficit in the Surplus account, letting the fact that the balance is a debit show that a deficit exists rather than a surplus.

Still another practice is to name the account "Surplus and Deficit" in order that it may accommodate either

condition. This plan, which is generally adopted in the "uniform methods" of accounting which have been promulgated by public service commissions and others, is in ordinary commercial practice found more frequently when as a result of the first year's business there is a deficit than when the business makes a net profit from the start. However shown on the books, the amount of a deficit is labeled "Deficit" when shown on a balance sheet.

In closing the books the amount of the ordinary profits for the fiscal period is usually first determined through the Profit and Loss account, which is then closed into Surplus in one lump sum. Thus there is normally only one credit to Surplus for each fiscal period, but to this rule there are a number of exceptions. After the books are closed, for example, corrections are often found necessary which affect the profit of the previous period. In order that the adjustment of these may not wrongfully appear as an item in the profit of the new period, the corrections, instead of being entered as current transactions, are made directly to the Surplus account as adjustments of the amount of profit or loss previously carried to that account, thus keeping them out of the transactions of the current year and thereby preventing them from affecting the showing of profits for the new fiscal period.

Of course, if the adjustments are in the nature of additions to profit, they are credits to Surplus; if they are reductions, they become debits to Surplus. If such adjustments are few in number and small in amount, there is no great objection to letting them appear as factors in the current Profit and Loss account. But errors that are of any importance should be adjusted through Surplus in order, as stated, that the profits of the present year shall not be affected and so that exact statements of the transactions of previous years may be prepared by recasting the previous statements, and exact comparisons thus be made between the operations of various years.

It is evident that this is a correct practice, for obviously omissions and errors in showing the transactions of previous years affected the final net credit to Surplus in the years in which they occurred. It therefore follows that the present surplus is larger or smaller as a result, and that Surplus is therefore the account to be corrected.

VIII

The practice is common also of entering directly to Surplus instead of to Profit and Loss account any extraordinary gains and losses whose inclusion in the current Profit and Loss account would render the resulting total of that account useless for purposes of comparison between various periods. The function of the Profit and Loss account is held to be the collection of the items affecting the normal operations of a business. If a concern not in the real estate business credits Profit and Loss with the gain resulting from the sale of a factory site, it destroys the basis of comparison between the profits of different years.

Under this practice the Profit and Loss account is limited to use as a clearing account for the *normal* items of income and expense, all abnormal charges and credits to proprietorship being made directly to Surplus. There may thus be entered directly to Surplus any gains or losses which are not the result of the regular normal operation of the business. In this category will be found such items as losses by fire and gains or losses resulting from sales of fixed assets.

The objection is raised against the practice of charging such unusual profits to Surplus that the habit of using the Surplus account for such purposes as this may result in its being turned into a dumping ground like the proverbial General Expense account. While the wrongful use of an account does not furnish sufficient ground for not sanctioning a legitimate use, yet the Surplus account should be used only with the greatest discretion for entries of this type, as in any event the extraneous and unusual items can be shown in a separate section of the profit and loss statement after operating profits have been determined.

Another objection to the practice of entering directly to Surplus any items of gain or loss applicable to the current period, whether normal or extraneous, is found in the marked influence which the federal income tax laws and forms have had on accountancy. This objection does not arise from anything in the laws themselves but is due to the form of reconciliation or proof of Profit and Loss and Surplus required to be filled out as a part of the corporation income tax return. A condensation of this form is given below, eliminating the subclassifications for clarity.

From this it will be seen that it is the expectation of the Bureau of Internal Revenue that all items affecting profit of the year (income whether taxable or not, and losses whether deductible or not) will be handled through the Profit and Loss account, so that the book profit may be proved by adding back to the taxable income those items of income which are not taxable (such as certain interest on Liberty bonds), and subtracting those expenses (such as donations), which are not deductible. The form of this schedule has had, as stated, a tendency to reduce the number of charges made directly to Surplus, because an awkward adjustment is necessary if extraneous and

Net taxable income		$43,271.10
Non-taxable income:		
Interest on Liberty Bonds		44.00
Other items		none
Total		$43,315.10
Unallowable deductions:		
Donations	$160.00	
Income and profits taxes paid	12,362.64	
Other items	none	
Total		12,522.64
Net profit by books		$30,792.46
Surplus at beginning of year		122,360.62
Other credits to Surplus during year		none
		$153,153.08
Dividends paid	$20,000.00	
Other debits to Surplus	none	
Total		20,000.00
Surplus at close of year		$153,153.08

unusual gains and losses are handled directly through the Surplus account.

When such items are entered through the regular Profit and Loss account, however, they should invariably be shown as unusual items in a separate section, if a profit and loss statement is prepared, in order that the profit made through normal operations may stand out by itself for comparative purposes.

The credits to Surplus account, then, consist of those items which increase the Surplus of the corporation, and will result from entries of the following types:

1. Showing the net profit at the end of a fiscal period.

2. Recording adjustments by way of increases of the net profit of previous fiscal periods, which net profit had already been closed to Surplus.

3. Recording the amounts of any unusual or extraneous profits.

4. Recording the amount of any premium received on the sale of the corporation's capital stock.

5. Setting up the amount of any increase in the value of the fixed assets held by the corporation, when it is felt advisable to record on the books an appreciation which is not realized by sale.

6. Showing the amounts forfeited on payments made on stock subscriptions, in cases of failure to complete contract.

7. Recording assessments on stock.

8. Setting up the difference between the par value of reductions of capital stock outstanding and the recompense paid to the holders, if less than this par value.

9. Showing the excess by which the value of tangible assets received for stock unquestionably is more than the par of the stock issued therefor.

10. Recording the profit on sales of treasury stock which had been repurchased for value.

11. Recording the amounts of any donations to the corporation.

The surplus so built up is decreased in any of the opposite ways, and also by dividends to the stockholders. All such decreases are debits to the Surplus account, and are indicated by entries of the following type:

1. Showing the net loss at the end of a fiscal period.

2. Recording adjustments by way of decreases of the net profit of previous fiscal periods, which net profit had already been closed to Surplus.

3. Recording the amounts of any unusual or extraneous losses.

4. Recording the amount of any discount received on the sale of the corporation's capital stock.

5. Writing down the valuation of the corporation's fixed assets for other reasons than those which result from operations. This may be considered as a subclassification of unusual or extraneous losses.

6. Recording the amounts of dividends declared.

7. Showing any other transactions which are opposite in effect to those by which surplus is increased.

Transactions of these various kinds will be discussed in detail in subsequent articles.

ECONOMIC CONTROL THROUGH ACCOUNT CLASSIFICATION

BY J. KARL MASON*

IN the science of business the corporation executive must take the attitude that the things which he controls —the plant, the materials, the money, the services, in fact all those items which economists term capital goods—are the property of his shareholders. By his use of those capital goods, by his administration of the economic activities surrounding that use, the executive will discover to his shareholders the truth of his own ability, the wisdom of his policies, the intelligence of his acts. He must keep safe the worth of the investment; but especially must he generate earnings—earnings sufficient not only to pay a fair return upon the investment, but also amply sufficient to provide for the preservation and growth of his enterprise. For tomorrow's economic power is dependent upon such achievement.

From the standpoint of the above requirements it is evident that the successful executive must know all conditions within the sphere of his jurisdiction. Without such knowledge his effort is but little better than guesswork. By the nature of the economic demands placed upon him the information that he requires must reflect for his activities the effect of the workings of economic law. It therefore remains that accounting practice, his medium for fact assembly, must be planned with due recognition of the economic factors pervading conditions and activities—and shall tell the facts salient to control of economic existence.

It would seem that thus far industry's conception of accounting practices has been born more of finance than of economics. In other words, accounting has been organized to assist in the management of money and the conduct of monetary affairs; it should rather contribute to the development and perpetuation of economic existence. It has been conceived as a story of income and its use; more properly it should become the story of capital, its condition, use, and achievements. As such it would deliver a tale of economic sequence, embodying all facts required by finance, but proceeding far beyond points reached in the management of funds.

By this conception it follows that accounting principles—the basis upon which successful practice is founded—must lend themselves to the problem. And since accounting success pivots upon the principle that the true presentation of fact is dependent upon accurate classification of figures, the first task is to create a chart of accounts that will impregnate all practices with the required economic purpose.

A study of manufacturing accounts discovers that the facts may be assembled into two great groups, the first of which may be named Capital and the second, Investment. Their net totals tell respectively the figure of *capital goods owned by the concern* and the *present worth of shareholders' investment* as represented by that Capital. These are the ultimate facts sought by economic accounting.

However, there are 10 contributing facts which must be considered. They are the figures as to:

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1. Working capital
2. Fixed capital
3. Capital variants
4. Funded debts
5. Outside investments
6. Relative capital
7. Capital stock
8. Capital surplus
9. Profit and loss surplus undistributed
10. Current operating surplus

II

To explain and define:

1. *Working capital* is that part of capital that is set apart for provision of the goods and services required for fabrication and for the conduct of business. Technically, it is the difference between the sums of *quick assets* and *quick liabilities*—so called.

2. *Fixed capital* is that aggregate of capital goods out of which arises the ability of a concern to create, or to act. Technically, it is the sum of values contained in real estate, in buildings and structures, and in equipment.

3. *Capital variants* are those changes in the utilities of capital goods that are occasioned by chance, use, or possession. Technically, they are the sums or reserves created to offset capital depletion and of reserves calculated upon amortization of funded debt, minus the sums of earnings appropriated for replenishment of capital and of values representing accretion of capital over its cost.

This subject deserves further attention. Action of chance, use, or possession upon capital may be likened to the action of existence upon the human body. Its tendency is toward constant absorption of vital content and wearing away of physical being. Vitality may be prolonged by maintenance; but the ultimate is dissolution. At the end, however, there is a primary difference between the effect upon the body possessions of man and the capital possessions of a concern. The body cannot replace itself; it must reproduce. Capital can both replace and reproduce itself; its success in either case depending on the intelligence of executive control. To provide for that replacement and reproduction, the executive must know how great has been the action of the three factors of depletion and accretion—chance, use, possession. Against depletion he must safeguard by setting aside funds out of which to replenish as occasion may show the need. If his capital possessions have increased in value to the economic world, his continued use of those possessions must recognize the increase, and the judgment of earnings must be based upon the result. His statement of condition must reflect the accretion.

4. *Funded debts* are liabilities in the nature of firm contracts for whose extinguishment there are set apart specific values out of earnings or capital. Technically, they include such items as bonds or mortgages payable, whose payment at maturity is insured by reserve funds created for the purpose.

5. *Outside investments* are values taken out of capital available for operation, and applied to the purchase of values in other enterprises. Technically, they comprise stocks and bonds of other concerns, valued at purchase prices therefor.

6. *Relative capital* is so named from the fact that items included thereunder take their capital valuation chiefly from the fact of their association with physical capital. Good-will, patent rights, licenses, etc., are the technical constituents. They are of intangible value but nevertheless important to a going concern.

III

The six items so far defined constitute all the major divisions of the Capital group. The figure resulting

from their assembly represents the net value of capital—or the net worth of the concern. It is the total of economic goods available for valuation of investment. Thereby it is seen to be the total of available assets, minus any indebtedness to other than shareholders.

There is need for but brief thought to discover the great importance of a wise apportionment of capital to the divisions named. If too much is given to working capital and too little to fixed capital, the producing capacity of equipment may be too meager to insure adequate use of working capital. With a thousand tons of coal to deliver, and but a single two-ton truck with which to make deliveries, it is not hard to foresee a constant presence of idle capital invested in coal. On the other hand, with too much given to fixed capital and too little to working capital, the effect may be experienced in idle equipment brought about by lack of sufficient materials to keep it continuously busy.

It does no harm to reiterate the need for judicious allotment of capital values. And as a corollary comes the accompanying need for accurate information with regard to the allotment. This cannot be accomplished by mathematical accuracy alone; it must be secured first of all by an adoption of correct principles of account classification. There are many instances of industrial trouble either from faulty information or injudicious control. Productive ability may readily be dissipated by too great expansion of fixed capital. This is very likely to occur during times of superficial prosperity such as experienced immediately after the World War. It is during such periods that the value of economic accounting may most be felt. It may prevent overpurchase of equipment and materials, or overexpansion of credit. Whatever the effect, it is certain that the knowledge that grows from correct accounting is the only sure foundation of the power to guide an economic unit, whether it be through prosperity or depression.

IV

But to continue the definitions. As *Capital* identifies the possessions of a concern, so *Investment* classifies the agencies through which those possessions were acquired. It embodies likewise the notion that the group so named becomes a statement of shareholders' lien upon capital goods. The four following accounts constitute the group.

7. *Capital stock* represents the value of the respective shareholders' liens by original contract at the time of investment. It becomes virtually a statement of proportionate ownership in the concern. Technically, it is the value of shares issued, figured at par or its equivalent.

8. *Capital surplus* is that value given to the increase in value of capital goods above their cost to the concern. Technically, it is the statement of investment value inherent in the items of accretion and appreciation included under *capital variants*.

9. *Profit and loss surplus undistributed* represents the residue from earnings that is allowed to remain invested for the use of the concern. Technically, it is the balance from earnings of periods prior to the beginning of the current fiscal year.

10. *Current operating surplus* is the residue from earnings of the current fiscal year after all expenditures, appropriations, and distributions have been made from income. Theoretically it is a part of investment so long as it remains to the use of the concern. Technically, it is the net result of a

combination of figures ordinarily set up as a profit and loss statement. Its total at the close of the fiscal year is to be transferred to *profit and loss surplus undistributed.*

V

It may here be well to recapitulate. Economic control requires of the accounting method a statement of *capital* and *investment.* The figures that contribute to those two facts must be grouped and classified as follows:

Capital

- Working capital
- Fixed capital
- Capital variants
- Funded debts
- Outside investments
- Relative capital

Investment

- Capital stock
- Capital surplus
- Profit and loss surplus undistributed
- Current operating surplus

The figures thus arranged would, in brief, constitute a statement of condition. In practical use, however, it is necessary to develop the facts to greater details; and in the daily work of accounting there is need for even greater elaboration than a most complete statement of condition would require.

As the work of handling such details increases, more pressing becomes the need for care in classification. Since it is well-nigh impossible to insure an accurate assembly of figures by the use alone of account titles, a classification of accounts must support the titles by a series of indexes, which in daily use may be employed as shorthand symbols for the account titles. To illustrate the details into which capital accounts and investment accounts may be divided, to show the typical group relationship existing between these several details, and to exemplify the principle of indexing as applied to all groups and details, a chart is presented on page 449 to show the relationship of these accounts and the structure upon which the schedule (or classification) of accounts is built. By examination it will be seen that the capital group is given the major index figure "1," and that the investment group is indexed by the figure "2." In other words, it will be recognized in daily practice, that an account whose index commences with the figure 1 is a capital account, while the initial figure 2 indexes the account as in the investment group. A similar conception is carried to the divisions of each group, and to the successive steps in the details of each division. So that by the use successively of the index figures, the finest detail may automatically be grouped into its proper place in the complete assembly.

By illustration, examine the indexing as applied to the account termed "Current Liabilities." Proceeding from right to left on the chart, current liabilities is the first division of quick liabilities, which in turn is the second division of working capital, this being the first division of capital which in its turn is the first group of the account schedule. The index symbol for current liabilities is 1121; for quick liabilities, 112; for working capital, 11; and for capital, 1.

The utility of such symbols must be evident. The method makes an account self-indexing; but of especial value is the accompanying fact that details may be expanded to almost any limit without confusing effect either upon daily practice or upon executive interpretation. An evidence of the possibilities is the fact that, with an expansion of the index figure to seven

- 1—Capital
  - 1—Working Capital
    - 1—Quick Assets
      - 1—Current Assets
      - 2—Inventories
    - 2—Quick Liabilities
      - 1—Current Liabilities
      - 2—Deferred Liabilities
  - 2—Fixed Capital
    - 1—Real Estate
      - 1—Land
      - 2—Land Improvements
      - 3—Land Leaseholds
    - 2—Buildings and Structures
      - 1—Foundations, walls, floors, partitions, etc.
      - 2—Heating Systems
      - 3—Lighting Systems
      - 4—Water Systems
      - 5—Sanitation Systems
      - 6—Ventilating Systems
      - 7—Fire and Sprinkler System
      - 8—Built-in Elevators
      - 9—Other Buildings Items
    - 3—Equipment
      - 1—Power Generation Equipment
      - 2—Power Distribution Equipment
      - 3—Processing Equipment
      - 4—Tools, Dies , Jigs, etc.
      - 5—Conveying and Handling Equipment
      - 6—Storage Equipment
      - 7—Shop Fixtures
      - 8—Office and Laboratory Equipment
      - 9—Other Equipment
  - 3—Capital Variants
    - 1—Depletion of Capital
      - 1—Reserve against Depreciation of Fixed Capital
      - 2—Reserve against Current Assets Uncollectible
      - 3—Reserve against Adjustment of Inventory Values
      - 4—Reserve against Contingencies
      - 5—Reserve against Amortization of Funded Debts
    - 2—Capital Accretion and Replenishment
      - 1—Increase in Sound Values of Real Estate
      - 2—Appreciation in Values of Buildings and Structures
      - 3—Appreciation in Values of Equipment
      - 4—Appreciation in Values of Inventories
      - 5—Replenishment Funds Appropriated to offset Depletion
  - 4—Funded Debts
    - 1—Bond Issues Outstanding Unamortized
    - 2—Mortgages Unamortized
  - 5—Outside Investments
    - 1—Stocks in Other Activities
    - 2—Bonds in Other Activities
  - 6—Relative Capital
    - 1—Good-will
    - 2—Patent Rights
    - 3—Licenses
- 2—Investment
  - 1—Capital Stock
    - 1—Preferred Shares Issued
    - 2—Common Shares Issued
  - 2—Capital Surplus
  - 3—Profit and Loss Surplus Undistributed
  - 4—Current Operating Surplus
    - 1—Sales Invoiced
      - 1—Sales of Product
      - 2—Sales of Raw Material
      - 3—Sales of Scrap
    - 2—Direct Costs of Sales
      - 1—Direct Costs of Product Sold
      - 2—Direct Costs of Raw Material Sold
      - 3—Direct Costs of Scrap Sold
    - 3—Operating Overhead
      - 1—Factory Administration
      - 2—Sales Administration
      - 3—Financial Administration
      - 4—General Administration
    - 4—Executive Appropriations
      - 1—Protection against Depreciation of Fixed Capital
      - 2—Protection against Current Assets Uncollectible
      - 3—Protection against Decrease of Inventory Value
      - 4—Protection against Contingencies
    - 5—Income Variants
      - 1—Income Deductions
      - 2—Income Additions
    - 6—Profit Distribution
      - 1—Government Taxes on Income
      - 2—Dividends to Shareholders

Figure 1. Chart Showing the Relationship of Accounts and Structure upon Which the Schedule of Accounts Is Built.

digits, subdivisions beyond those included in the accompanying chart may be multiplied to 38,637 without confusion of indexes, provided all the possibilities of the index method are made use of.

The arrangement of accounts by the foregoing method does not in the least interfere with the needs of finance. All the facts of the ordinary balance sheet may still be found. Total assets, total liabilities, earnings, expenses, income, profit and loss—or any of their details—are still available. Yet, while interfering in no measure with finance, this method of classification will tell other facts in an automatic way that from the ordinary balance sheet must be extracted by analysis—sometimes with considerable labor and frequently only imperfectly. To the executive, that labor is distasteful, and rightly so. He is entitled to expect that his accounts shall tell him, tersely, the facts that he should know. And those facts are, fundamentally, facts as to economic condition.

To aid in a further understanding of the theory of classification, a complete schedule of manufacturing accounts is appended hereto. It is presented purely for the purpose of illustrating the possibilities of the index method, but may serve to define more fully the structure of the major groups and their contributing divisions. Effort is made in it to adhere to accepted practices so far as they do not interfere with the economic motif that is intended. Wherever there is deviation, the intent is for more direct contribution to economic control, and for greater assistance to the executive who is not an accountant.

Since economic law controls industrial fabric, the only safe method of administration of capital is that which pivots upon a true knowledge of economic condition. Accounting, being the agency for fact assembly, must, then, lend itself to the analysis of economic factors. And its first requisite element is a classification of accounts, so conceived and so indexed as to impregnate the whole with the economic motif and, moreover, guarantee a truthful presentation of the effects of economic law upon the enterprise.

SCHEDULE OF ACCOUNTS[1]

1 Capital
11 Working Capital
111 Quick Assets
1111 Current Assets

- –1 Cash on Hand and in Banks
- –11 General Funds in Banks
- –12 Pay-Roll Funds
- –13 Petty Cash Funds
- –14 Funds in Transit
- –2 Accounts Receivable
- –21 On Open Account Terms
- –22 On Trade Acceptance Terms
- –23 On S. D. B. L. Terms
- –24 On C. O. D. Terms
- –3 Trade Acceptances Receivable
- –4 Notes Receivable
- –5 Royalties Receivable
- –6 Advances to Employees
- –7 Sundry Debtors
- –71 Freight Claims in Action
- –8 Accrued Interest Receivable
- –9 Other Current Assets

1112 Inventories

- –1 Materials in General Stores
- –2 Labor Undistributed
- –21 Shop Wages
- –22 Weekly Salaries
- –23 Monthly Salaries
- –3 Charges Undistributed
- –31 Insurance Prepaid
- –32 Advertising and Publicity Prepaid

[1] The figure at the left is the index to the account.

-33 Taxes Real and Personal Prepaid
-34 Interest Prepaid
-35 Rents Prepaid
-36 Royalties Prepaid
-37 Tool Expense Unabsorbed
-38
-39 Other Charges

-4 Work in Process
-41 Material Values
-42 Labor Values

-5 Materials in Sub-Stores
-6 Product in Warehouse
-7 Consigned Stocks in Distributor's Hands
-8 Unaudited Purchases
-9 Other Inventories

112 QUICK LIABILITIES

1121 Current Liabilities
-1 Salaries and Wages Payable
-11 Shop Wages Payable
-12 Weekly Salaries Payable
-13 Monthly Salaries Payable
-14 Unclaimed Wages and Salaries

-2 Accounts Payable
-21 Items Vouchered for Payment
-22 Items Unaudited due for Discount

-3 Trade Acceptances Payable
-4 Notes Payable
-41 Notes Payable for Borrowed Funds
-42 Notes Payable for Other Indebtedness

-5 Royalties Payable
-6 Unaudited Invoices
-7 Sundry Creditors
-71 Dealers' and Agents' Deposits
-72 Customers' Deposits

-8 Accrued Interest Payable
-81 Interest Payable on Notes
-82 Interest Payable on Mortgages
-83 Interest Payable on Funded Debt

-9 Other Current Liabilities

1122 Deferred Liabilities
-1 Commissions Accrued, not due
-2 Taxes Accrued, not due
-21 Real Estate Taxes
-22 Personal Taxes
-23 State Franchise Taxes
-24 Federal Income Taxes
-25 Federal Excess Profits Taxes
-26 Capital Stock Taxes
-27 Excise Taxes
-28
-29 Other Taxes

-3 Quantity Discounts Accrued, not due
-4 Rents Accrued, not due
-5 Dividends Accrued
-6
-7
-8
-9 Other Deferred Liabilities

12 FIXED CAPITAL

121 REAL ESTATE

1211 Land
1212 Land Improvements
1213 Land Leaseholds

122 BUILDINGS AND STRUCTURES

1221 Foundations, Walls, Floors, Partitions, etc.
1222 Heating Systems
1223 Lighting Systems
1224 Water Systems
1225 Sanitation Systems
1226 Ventilating Systems
1227 Fire and Sprinkler Systems
1228 Built-in Elevators
1229 Other Building Items

123 EQUIPMENT

1231 Power Generation Equipment
1232 Power Distribution Equipment
1233 Processing Equipment
1234 Tools, Dies, Jigs, etc.
1235 Conveying and Handling Equipment
1236 Storage Equipment
1237 Shop Fixtures
1238 Office and Laboratory Equipment
1239 Other Equipment

13 CAPITAL VARIANTS

131 DEPLETION OF CAPITAL (Reserves against)

1311 Depreciation of Fixed Capital
1312 Current Assets Uncollectible
1313 Adjustment of Inventory Values
1314 Contingencies
1315 Amortization of Funded Debts

132 Capital Accretion and Replenishment
1321 Increase in Sound Values of Real Estate
1322 Appreciation in Values of Buildings and Structures
1323 Appreciation in Values of Equipment
1324 Appreciation in Values of Inventories
1325 Replenishment Funds Appropriated to offset Depletion

14 Funded Debts
141 Bond Issues Outstanding Unamortized
142 Mortgages Unamortized
15 Outside Investments
151 Stocks in Other Activities
152 Bonds of Other Activities
16 Relative Capital
161 Good-will
162 Patent Rights
163 Licenses
2 Investment
21 Capital Stock
211 Preferred Shares Issued
212 Common Shares Issued
22 Capital Surplus
23 Profit and Loss Surplus Undistributed
24 Current Operating Surplus
241 Sales invoiced
2411 Sales of Product
2412 Sales of Raw Material
2413 Sales of Scrap

242 Direct Costs of Sales
2421 Direct Costs of Product Sold
–1 Costs for Direct Materials
–2 Costs for Direct Labor
2422 Direct Costs of Raw Material Sold
–1 Costs for Direct Materials
–2 Costs for Direct Labor
2423 Direct Costs of Scrap Sold
–1 Costs for Direct Materials
–2 Costs for Direct Labor

243 Operating Overhead
2431 Factory Administration
–1 General Factory Management
–11 Shop Executive Offices
–111 Materials and Supplies
–112 Salaries and Wages
–113 Other Charges
–12 Shop Idle Time
–121
–122 Salaries and Wages
–123
–13 Undistributed Factory Expense
–131 Materials and Supplies
–132 Salaries and Wages
–133 Other Charges
–2 Design of Product
–21 Engineering Office
–211 Materials and Supplies
–212 Salaries and Wages
–213 Other Charges
–22 Drafting-Room
–221 Materials and Supplies
–222 Salaries and Wages
–223 Other Charges
–23 Defective Design (Waste From)
–231 Materials and Supplies
–232 Salaries and Wages
–233 Other Charges
2431–3 Schedules and Deliveries
–31 Supervisor's Office
–311 Materials and Supplies
–312 Salaries and Wages
–313 Other Charges
–32 Timekeeping and Sub-Stores
–321 Materials and Supplies
–322 Salaries and Wages
–323 Other Charges
–33 Warehouse and Shipping-Room
–331 Materials and Supplies
–332 Salaries and Wages
–333 Other Charges
–34 Outward Traffic Department
–341 Materials and Supplies
–342 Salaries and Wages
–343 Other Charges
–4 Process and Fabrication
–41 Foremanship
–411 Materials and Supplies
–412 Salaries and Wages
–413 Other Charges
–42 Shop Trucking and Elevation
–421 Materials and Supplies
–422 Salaries and Wages
–423 Other Charges
–43 Defective Manufacture (Waste From)

–431	Materials and Supplies
–432	Salaries and Wages
–433	Other Charges
–44	Direct Costs not Distributed to Product
–441	Direct Materials
–442	Direct Labor
–5	Selection and Maintenance of Equipment
–51	Master Mechanic's Office
–511	Materials and Supplies
–512	Salaries and Wages
–513	Other Charges
–52	Maintenance of Factory Buildings and Equipment
–521	Materials and Supplies
–522	Salaries and Wages
–523	Other Charges
–53	Removal and Reinstallation of Equipment
–531	Materials and Supplies
–532	Salaries and Wages
–533	Other Charges
–6	Generation and Distribution of Power
–61	Power Engineer's office
–611	Materials and Supplies
–612	Salaries and Wages
–613	Other Charges
–62	Power Plant Operation
–621	Materials and Supplies (other than fuel)
–622	Salaries and Wages
–623	Other Charges
–63	Fuel and Equivalents
–631	Fuel Consumed
–632	
–633	Power Purchased
–7	Procurement and Storage of Materials
–71	Purchasing Office
–711	Materials and Supplies
–712	Salaries and Wages
–713	Other Charges
–72	Receiving and Storage Department
–721	Materials and Supplies
–722	Salaries and Wages
–723	Other Charges
–73	Inward Traffic Department
–731	Materials and Supplies
–732	Salaries and Wages
–733	Other Charges
–74	Defective Materials (Waste From)
–741	Materials and Supplies
–742	Salaries and Wages
–743	Other Charges
–8	Inspection of Workmanship and Product
–81	Chief Inspector's Office
–811	Materials and Supplies
–812	Salaries and Wages
–813	Other Charges
–82	Shop Inspection
–821	Materials and Supplies
–822	Salaries and Wages
–823	Other Charges
–83	Faulty Inspection (Waste From)
–831	Materials and Supplies
–832	Salaries and Wages
–833	Other Charges
2432	Sales Administration
–1	General Sales Management
–11	Sales Manager's Office
–111	Materials and Supplies
–112	Salaries and Wages
–113	Other Charges
–12	Sales Allowances to Customers
–121	Allowances for Business Policy
–122	Allowances for Breakage in Transit
–13	Discounts Allowed
–131	Discounts under Payment Terms
–132	Discounts for Sales Quantities
–14	Transportation Allowed
–141	Transportation Allowed under Sales Terms
–142	Transportation Excess by Delayed Shipment
–2	Field Sales Activities
–21	Salesmen and Inspectors
–211	Materials and Supplies
–212	Salaries and Wages
–213	Traveling Expenses and Other Charges
–22	Service Department
–221	Materials and Supplies
–222	Salaries and Wages
–223	Other Charges
–3	Advertising and Publicity
–31	Advertising Department

–311 Materials and Supplies
–312 Salaries and Wages
–313 Other Charges
–32 Publicity
–321 Materials and Supplies
–322 Salaries and Wages
–323 Contracts, Cost of Space, Etc.
–4 Fees and Commissions
–5 Gratuitous Samples and Supplies
–6 Unclassified Sales Expenses

2433 Financial Administration
–1 General Financial Management
–11 Financial Executive Offices
–111 Materials and Supplies
–112 Salaries and Wages
–113 Other Charges
–12 General Accounting
–121 Materials and Supplies
–122 Salaries and Wages
–123 Other Charges
–13 Cashier and Pay-Roll Division
–131 Materials and Supplies
–132 Salaries and Wages
–133 Other Charges
–2 Audits and Statistics
–21 Audit of Income and Expenditure
–211 Materials and Supplies
–212 Salaries and Wages
–213 Other Charges
–22 Inventories Division
–221 Materials and Supplies
–222 Salaries and Wages
–223 Other Charges
–23 Tabulating Division
–231 Materials and Supplies
–232 Salaries and Wages
–233 Other Charges
–24 Statistical Division
–241 Materials and Supplies
–242 Salaries and Wages
–243 Other Charges
–3 Unclassified Financial Expenses

2434 General Administration
–1 General Executive Expenses
–11 Executive Offices
–111 Materials and Supplies
–112 Salaries and Wages
–113 Other Charges
–12 General Office Management
–121 Materials and Supplies
–122 Salaries and Wages
–123 Other Charges
–13 Legal Department
–131 Materials and Supplies
–132 Salaries and Wages
–133 Other Charges
–14 Miscellaneous General Office Expense
–141 Materials and Supplies
–142 Salaries and Wages
–143 Other Charges
–15 Estimates and Standards Division
–151 Materials and Supplies
–152 Salaries and Wages
–153 Other Charges
–2 Welfare and Protection
–21 Employment Department
–211 Materials and Supplies
–212 Salaries and Wages
–213 Other Charges
–22 Hospital
–221 Materials and Supplies
–222 Salaries and Wages
–223 Other Charges
–23 Safety and Sanitation
–231 Materials and Supplies
–232 Salaries and Wages
–233 Other Charges
–24 Watchman Service
–241 Materials and Supplies
–242 Salaries and Wages
–243 Other Charges
–25 Education and Athletics
–251 Materials and Supplies
–252 Salaries and Wages
–253 Other Charges
–3 Restaurant
–31 Income from Food Sales (This is a credit account.)
–32 Restaurant Expense (This is a debit account.)
–321 Materials and Supplies
–322 Salaries and Wages
–323 Other Charges
–4 Experimental and Development Work
–41 Engineering Offices
–411 Materials and Supplies
–412 Salaries and Wages
–413 Other Charges
–42 Laboratory Expense
–421 Materials and Supplies

–422 Salaries and Wages
–423 Other Charges
–5 Bonuses and Awards
–6 Charities and Donations
–61 Gifts to Educational, Charitable, etc., Institutions
–62 Gifts to Other Recipients
–7 Fees, Assessments, Etc.
–71 Taxes, Real, Personal, and Franchise
–72 Insurance Premiums
–73 Leases and Rents
–74 Audits and Appraisals
–75 Royalties Payable
–76 Directors' Fees
–8 Transportation Costs Undistributed
–9 Unclassified General Expenses

244 Executive Appropriations

2441 For Protection against Depreciation of Fixed Capital
2442 For Protection against Current Assets Uncollectible
2443 For Protection against Decrease of Inventory Values
2444 For Protection against Contingencies

245 Income Variants

2451 Income Deductions
–1 Unrealized Profit on Returned Sales
–11 Sales Value of Items Returned (This is a debit account)
–12 Direct Costs of Items Returned
–121 Direct Materials
–122 Direct Labor
(These are credit accounts; contra entries to be debits against inventory accounts to which returned items are charged)
–2 Interest Payable
–21 Interest on Bonds Outstanding
–22 Interest on Notes Payable
–23 Interest on Trade Acceptances
–24 Interest on Mortgages
–25 Interest Payable on Overdue Accounts Payable
–3 Internal Revenue and Exchange on Checks etc.

2452 Income Additions
–1 Cash Discounts Taken
–2 Interest Receivable
–21 Interest Receivable from Outside Investments
–22 Interest Receivable on Bank Balances
–23 Interest Receivable from Notes Receivable
–24 Interest Receivable from Trade Acceptances Taken
–25 Interest Receivable from Accounts Receivable
–3 Dividends Receivable
–4 Rents Receivable
–5 Royalties Receivable
–6 Bad Debts Recovered
–7 Scrap Returned from Process
–8 Reclaimed Materials
–81 Good Value of Materials Reclaimed
(This is a credit account; contra entries to be debits against inventory accounts to which reclaimed items are delivered)
–82 Costs of Reclamation
–821 Materials and Supplies (including scrap value of materials to be reclaimed)
–822 Salaries and Wages
–823 Other Charges
–9 Other Income Additions

246 Profit Distribution

2461 Government Taxes on Income
–1 Federal Income Tax
–2 Federal Excess Profits Tax
–3 State Income Tax

2462 Dividends to Shareholders
–1 Dividends on Preferred Shares
–2 Dividends on Common Shares

(*Note:* The compilation of above Capital accounts results in a statement of Net Capital; the compilation of the Investment accounts delivers a statement of Present Worth of investment.)

A MESSAGE TO THE MAILING DEPARTMENT

BY H. A. BLACKMAN*

II—THIRD-CLASS MAIL

THE third-class mail is mainly used for printed advertising, and its one big problem is to make this advertising pay. Every year the business world invests about $500,000,000 in mail "ads" and at least half of this huge amount is a dubious investment. Some of it barely pays expenses, some of it is a dead loss, and some of it is an actual damage to the thing advertised. $250,000,000 is a sum worth thinking about even in these days of lavish expenditure. This waste of one half of all third-class mail is utterly useless. The other half pays and pays well—some of it a hundredfold. The present article, while written from the post-office standpoint, goes somewhat beyond this in order to point out the difference between the winning and the losing advertisement.

Most advertisers are filled with faith, confidence, and enthusiasm in their idea. This faith in their own enterprise is so strong that they cannot see why its mere announcement will not create the same enthusiasm in others. That leads them into the error of thinking that any kind of an announcement will do. They throw an "ad" together, prepare it in slip-shod haste and then sit back and pray for results.

It is then too late for prayer. That should be done before the printing press is started. Faith and confidence in an advertised article are not created by a mere announcement. Most people must be "shown." The "ad" must not only express the advertiser's own sincere faith, but it must inspire that faith in others. That is the one great point which is ignored by those who fail. The creation of faith in anything is an art. Let us take the details of the mail "ad," one by one, and see how this art does its work.

Any piece of mail receives a certain amount of respect merely because it is United States Mail, but most of our third-class mail loses that respect before it comes out of the envelope. This first impression is so important that shrewd advertisers spend hundreds of dollars to make the outer appearance of their advertising "snappy" and faith-inspiring. A cheap envelope with scrawled address and carelessly placed stamp usually brings a glance of derision and subconscious thoughts about as follows: "Sloppy work, cheap, careless, brainless, does not interest me." Into the wastebasket it goes without examination, and preparation, printing, addressing and postage are a dead loss.

But the exterior of an "ad" can be made neat almost as easily as it can be made slovenly. It is all the better if it is also made tasty and artistic, and it is still better if it promises something, provided that the enclosure will justify the promise. But, when the envelope promises something which the enclosure will not fulfill, that letter is not only a dead loss but a positive damage to the thing that it advertises. That is why the shrewd advertiser always avoids extravagant announcements on his envelopes.

The exterior of an "ad" should

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breathe sincerity and simplicity. These two things are a whole army in themselves. They are the most powerful winners of men that the world has ever known. Make the exterior of the "ad" show them. Make it look as though it were proud of its mission and too big and important for trivial carelessness.

II

Never use a wire clip to close a folder. The handling of such mail almost always loses many of the clips because the clip of one folder is so prone to catch upon the next one. Also when they are used many of these clips catch and tear their neighbor folders in handling so that a large proportion of them arrive at their destination torn and tattered. Prepare the folder so that it can be examined from the ends (in order to avoid the first-class rate) and then use a "sticker" in place of the clip. It may take a little trouble and forethought to make a folder that can be fully examined from the ends, but the avoidance of a wire clip is worth any amount of trouble and study. They are one of the surest losers of advertising money that can be used.

If third-class material is to be returned in case of failure to reach the party addressed, print the return address in the usual place and, just below it, the notation "Return Postage Guaranteed." That will bring all the undeliverable stuff back at postage price and this is worth many good dollars if the list of names is used again. It also impresses the receiver with the fact that you value the material sent him.

The best way to pay postage on third-class matter is by the "permit" method or by the use of precanceled stamps. This saves canceling work in the post-office and gets quicker service. It is impossible to give in little space the full advantage to be derived from these two methods of paying postage, but that one point alone—prompter service—is enough to win every shrewd advertiser in the land. In former days the public regarded "permit" and precanceled stamp stuff as "junk," but the last decade has wiped out all such prejudice and, today, such mail is given just as much respect as though it had gone through the canceling machine. The use of either of these time-savers requires a permit from the Post-office Department, but a simple application to your postmaster is sufficient to get the permit required.

Any real novelty on the exterior of advertising mail matter will pay well. It gives the impression that the sender is up to date in his methods. The newest way of paying postage on first-class mail is by "stamp meter" machines which count and postmark mail with a notation of postage paid. Shrewd advertisers were quick to pick up this innovation for a novelty upon their advertising. Instead of the plain "permit" in the upper right-hand corner of the envelope, they had the printer make an imitation of the "stamp meter" postmark and print it right with the "permit." It made the envelope look like a classy piece of first-class mail and the novelty brought out a smile of approval from the recipient of that mail. When this novelty becomes common, it will be of small value and new novelties will take its place, but this little trick of the advertising game will always be remembered as a clever example of the use of novelty to win approval.

To summarize, advertising matter sent by mail must not look cheap and it must not show carelessness of preparation. It must be neat, tasty, or even artistic, but it must not promise more then the enclosure will justify. It must be simple and sincere. It must avoid wire clips and at the same time avoid

sealing that would make it first-class mail. It should carry a return postage guarantee and its own postage should be paid by "permit" or precanceled stamps. If it is possible to find some real novelty to use in connection with it that will win admiration and a sympathetic reception, that novelty should be used.

The things mentioned are so simple that they seem positively trivial, and yet the circulars which pass through the post-office show how very few advertisers know these simple little points. Their apparent triviality is the reason that they are ignored. From the standpoint of 20 years of postal experience and study I believe that the faithful observance of these simple points would save mail advertisers over $100,000,000 every year. Is that trivial?

III

The average mail advertiser has a very hazy idea about the preparation of circulars for the post-office. He almost always chooses the cheapest, quickest way of addressing, stamping, and mailing his stuff. He knows nothing of the costly waste produced by this method of mail "ad" preparation and, when he reaches the post-office with his material, it is then too late to tell him. To tell him in time is the purpose of this article.

A mail "ad" should be economical, *never* cheap. And this applies to the very first requirement, a mailing list. The mailing list is a striking example of this fact. A cheap list will send one-fourth of its circulars to the wrong address and on a fairly large list that will cost from ten to a hundred times the difference between the cheap and good mailing list. To use a cheap mailing list under such circumstances is just plain extravagance. The good list would have saved 95 per cent of that loss. Furthermore, it would have resulted in economy of time and effort because *good* mailing lists are organized by towns and states, not upon an alphabetical arrangement of names.

If you come into possession of a valuable mailing list that is not already arranged in towns and states, it will pay you well to have your office force rearrange it on that plan. Any clever office manager can study this list and figure out the most economical method of rearrangement. Whatever the plan may be, it must result in the preparation of the mail so that it will be presented at the post-office carefully separated into towns and states.

When a mailing list is arranged in towns and states, it is almost criminal carelessness to mix circulars for the various states. Each girl who does the addressing should work on one state at a time and keep her work separate from that of the others. Whenever she has ten or more pieces for a town, she should keep them in a bundle by themselves either by rubber bands or criss-crossing. The girls who fill and stamp these envelopes should follow the same plan—carefully keeping each town separate and never mixing states. When the job is finished, each state is separate and each town for that state is kept to itself.

Why all this care? Because it pays. When a bunch of such mail reaches the post-office, it waits for nothing. In its own class it runs right in ahead of the "junk" from the other fellow who did not care. There is no delay for facing because it is already faced nicely. There is no tedious waiting for the canceling machine to be idle because its postage is paid with permit or precanceled stamps. It does not lie dead until everything else is cleaned up for some clerk to "state" it because it is already "stated." There is no further delay to perform the slow and tedious

task of separating the town make-ups because they are already separated. And while the carelessly prepared mail is waiting, this "preferred" mail is stepping right in and taking the cream of the service.

But it must never be forgotten that third-class service is not first-class service. You do not pay the price of third-class and get first. The first-class receives first attention from drop to delivery; the third-class receives the last. The first-class makes its journey in closely locked pouches; the third-class in easily opened sacks. In case of wreck or fire, the first-class gets first attention; the third-class comes last. The first-class rides on trains where the third-class cannot go. The first-class often gets city distribution on the train; the third-class never. The first-class gets directory and forwarding service denied the third-class. Greatest of all, the first-class is received with an appreciation and dignity never accorded the third.

All these facts have turned the attention of shrewd advertisers to the use of first-class mail for all advertising that does not weigh over one ounce. It is a positive fact that a good, small "ad" sent first-class will bring about 50 per cent more returns than the same "ad" sent third-class. Business men have learned this odd fact and, as a result, our first-class advertising has increased about 200 per cent in the last three years. This fact is well worth every advertiser's attention. When time is important, the third-class should not be used unless the price of first-class is prohibitive.

IV

Advertising does not constitute the entire bulk of the third-class mail. Most people define third-class matter as "printed matter on paper" but that is just a bit misleading. Books are "printed matter on paper," but anything bound like a book is fourth-class matter or parcels post. Moreover, newspapers and magazines are "printed matter on paper," but any publication having a regular bona fide subscription list is second-class matter, not third. But, with these two exceptions of books and periodicals, all printed matter on paper is third-class mail and goes at the rate of 2 ounces for a cent.

There is another queer little quirk in the third-class which should be understood by everyone. When a package of third-class matter goes over 4 pounds, it becomes parcels post. See how it works. You want to send a package of leaflets from Philadelphia to New York. The package weighs 3 pounds, 14 ounces, which is 62 ounces. That costs you 31 cents. If you add another pound of leaflets, that makes the package weigh 78 ounces which is over the 4 pounds. That makes it a 5 pound parcel and the postage on it from Philadelphia to New York would be 9 cents. Thus, by adding a pound to your package, you reduced the postage from 31 cents to 9 cents.

Another freak of postal rates should be remembered by all persons using the mails for catalogues or books. Any book up to 8 ounces is parcels post just the same, but it goes at the third-class rate of 2 ounces for a cent. Thus, a 7-ounce catalogue would cost 4 cents to any point in the American possessions. But, if that book or catalogue goes over the 8-ounce limit, it is still parcels post but must pay the rate for one full pound. Thus, a seven-and-one-half ounce catalogue from New York to San Francisco would cost 4 cents, but if it weighed just one ounce more, it would cost three times that much, or 12 cents, because the rate for one pound to the eighth zone is 12 cents. If the catalogue went from New York to Philadelphia, it would be in the first

zone and the rate would be 5 cents. Thus, mailers of books or catalogues can ignore zoning if the weight is 8 ounces or less, but if over 8 ounces, care must be taken to zone and properly stamp this matter.

V

No business firm should attempt to use the mails without the Post-office Department's yearly postal guide which can be bought at any post-office very cheaply. Near the beginning of this guide, will be found complete directions for the classification of mail. A half-hour's study of these directions will make one an expert in mail classification and enable him to avoid a hundred costly errors.

Under the third-class as specified in the guide will be found maps, blue-prints, tags, photographs, proof-sheets with their manuscripts, music, and about one hundred other items. These things are carried at the "two ounces for a cent" rate in every case unless they make a bundle of over 4 pounds. Let us note just a few important points in connection with such matter.

Although maps are third-class matter they become first-class when any extra writing is put upon them. This is true of any third-class matter unless that writing is mentioned in the "permissible additions" to third-class matter which are mentioned in the guide. Time after time, maps come to the post-office with, "Our farm is right where you see the star" or some other such message written upon them and, always, there must be delay, annoyance, and expense in getting such stuff delivered.

The same thing is true of unsealed letters. If they are entirely in print, they get the third-class rate, but writing or typewriting, even in filling blanks on printed forms, will make any unsealed letter first class *unless* this writing is mentioned in the "permissible additions" before referred to. No personal message gets the third-class rate, sealed or unsealed.

Letters in imitation typewriting or imitation handwriting can be sent in unsealed envelopes as third-class matter but they must be presented at the post-office—never placed in the collection box—and in quantities of 20 or more identical copies. Every post-office in the land has trouble with advertisers who break this regulation and suffer for it. Before putting out an imitation typewriting "ad," take great care that this regulation is observed because it means a most aggravating and expensive annoyance if it is not.

SOIL EXHAUSTION IN RELATION TO THE FEDERAL INCOME TAX LAWS

BY POWELL CHANDLER*

THE question of soil exhaustion and its academic treatment from an accounting point of view seems to have been very generally neglected. This is all the more remarkable by reason of the fact that the loss actually suffered in this respect forms one of the most vital issues confronting the owner of farm property. By ignoring charges for his own services, loss through soil exhaustion, and, in many instances, adequate depreciation on his plant and equipment as legitimate and necessary deductions from his income the farmer, in effect, pays income tax on fictitious earnings. It may safely be said that there is no other business under the sun where executive remuneration, depletion, and depreciation do not consistently form part of the current charges against production, to be calculated as contributing to the cost of the product before the price to the consumer is determined.

This difference in the case of the farmer is due to the economic situation that surrounds him. He has no hand in the determination of the price paid for his product; this all-important factor is decided by nature and the grain exchanges. The price per bushel of grain bears no relation whatever to cost of production. The main idea of the average farmer is to produce as cheaply as he is able. Too often this is done by ignoring the less obvious items of cost, that is those not represented by the actual spending of money. To come down to hard facts, the farmer cannot afford to recognize the costs ordinarily and otherwise universally attributable to business. For a farmer to charge his operations with a salary for himself, as manager, of, say, $3000 per annum plus a proper allowance for soil exhaustion, would be an almost unheard-of proposition. Yet there is no other business where executive salaries and adequate provision for depletion, or depreciation, are not considered essential charges against cost of operations.

Consideration of the situation of the farm owner in so far as soil exhaustion is concerned reveals some interesting facts—facts generally overlooked both by the accountant and by the Treasury Department. The attitude of the last named is explainable. Recognition of the factor of soil exhaustion in computing taxable income would result in the refunding of large sums of money to the taxpayers on account of taxes erroneously collected. Exactly how large an amount would be involved it is impossible to say; nevertheless, a study of the subject will show that it would be no mean sum.

The legality of the deduction cannot be questioned. The Internal Revenue Acts of 1917, 1918, and 1921, in almost the same phraseology, allow:

> . . . a reasonable allowance for the *exhaustion of property* used in the trade or business.

Further, the Treasury Regulations interpreting the 1918 and 1921 laws state that:

> . . . the necessity of depreciation allowances arises from the fact that certain

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Table I. Average Number of Pounds of Plant Food Removed Per Acre by Six Representative Crops

Crop	Yield Per Acre	Nitrogen	Phosphorus	Potassium
Clover[1]	1 ton	40.0	5.0	30.0
Wheat[1]	20 bu.	28.4	4.8	5.2
Corn[1]	30 bu.	30.0	5.1	5.7
Oats[1]	30 bu.	19.8	3.3	4.8
Cotton Lint[2]	100 lbs.	0.3	0.1	0.5
Cotton Seed[2]	218 lbs.	6.8	2.8	2.5

[1] Kansas State Experiment Bulletin No. 220, p. 6.

[2] U. S. Dept. of Agriculture, Bulletin No. 48, p. 3.

property used in the business *gradually approaches a point where its usefulness is exhausted.*

In so far as the soil is concerned the use of the word "exhausted" in the foregoing is peculiarly applicable. The word has been specifically defined as follows: "To deprive entirely of essential properties; *as to exhaust a soil.*"[3] That the soil, that part of the earth's surface that contains the elements of plant life, is subject to exhaustion as indicated in this definition is capable of being clearly and indisputably demonstrated.

II

The history of the United States and its development from east to west is the history of soil exhaustion and the compulsory moving on of the farming populace as its consequence. Massachusetts had its area of farm land cut down by one-half in the period 1880 to 1910. During the past 50 years the productivity of Kansas soils has decreased 40 per cent as to corn, and 17 per cent as to wheat. The impoverishment of the Dakota soils, and the bleeding of the fertile valleys of California by the original settlers are further indications of the same exhaustion of the essential properties of the soil.

While various contributing factors, greed, short lease tenancies and so forth, have contributed to the general results alluded to, it is effect rather than cause which is the matter of concern at the moment. What the specific effect has been is reflected in Tables I, II, and III:

It will be noted that only three elements of productivity are included in the above table. There are two others to be taken into consideration—sulphur and calcium. As the late Cyril G. Hopkins, of the University of Illinois Agricultural Department, said:

> The neglect of one or more of these five elements has reduced the fertility of most cultivated soils in the United States, has greatly impoverished the old farm lands, and has brought agricultural abandonment to millions of acres in the original thirteen states.

Reducing Table I to dollars and cents we have the cost of replacing the elements abstracted from the soil, this based on the 1919 market prices of those elements:[4]

[3] Funk and Wagnall's Standard Dictionary.

[4] Kansas State Agricultural College, Circular No. 12, December, 1920.

Nitrogen	42½	cents per pound
Phosphorus	20	" " "
Potassium	18	" " "

The cost per acre of this replacement is shown in Table II.

The following Table II does not allow for freight nor spreading charges in connection with the physical application of the fertilizer containing these necessary constituents. Neither is any allowance made for replacing calcium, nor is consideration given to loss by leaching—a loss attributable to the elements which occurs whether the land is cropped or not. The loss attributable to leaching "may be considered as from 12 to 20 pounds of nitrogen per acre on cultivated fields of moderately rich soil in humid regions, and about 40 pounds per acre on heavily manured fields or on soil of high fertility and under heavy rainfall." In other words, and based on the values used above, the loss through leaching may in money values amount to anything from \$5.10 up to \$17 per acre.

From the figures so far evolved the actual loss attributable to soil exhaustion may be summarized in Table III.

For a farmer having a 200 acre farm the loss of the elements of plant life resulting through the cropping of a corn crop yielding 30 bushels to the acre would amount, under the above computation, to \$4,480.

III

The question now presents itself as to how far fertilization actually applied to the land, and included in the expenses of operating farms, compensates the losses reflected in Table II. Consideration of various statistics giving the amount of fertilizer used per cultivated acre throughout the United States, goes to show that sums ranging from a minimum of a few cents to a maximum of \$6 are expended in this connection. Even under the maximum average expenditure, therefore, the farm owner is replacing less than one-third of the elements lost through cropping a 30

Table II. Cost Per Acre of Elements Removed by Crops Indicated in Table I

Crop	Nitrogen	Phosphorus	Potassium	Total
Clover	\$17.00	\$1.00	\$5.40	\$23.40
Wheat	12.07	.96	.94	13.97
Corn	12.75	1.02	1.03	14.80
Oats	8.42	.66	.86	9.94
Cotton	3.02	.58	.45	4.05

Table III. Total Loss Per Acre in Elements of Plant Food Removed by a Crop of Corn Yielding 30 Bushels to the Acre

Cost of plant foods abstracted by the crop (Table II)	\$14.80
Cost of application of fertilizer containing above elements of plant food	1.50
Cost of application of lime to provide calcium removed by crop	1.00
Value of elements lost by leaching, based on lowest estimate	5.10
Total cost per acre	\$22.40

bushel per acre yield of corn. Speaking generally, it is this difference between the elements actually replaced and the total value of the elements lost that no provision is made for in ordinary expenses of operation or in the computation of taxable income.

The conclusions arrived at may be summarized as follows:

1. In taking crops from the soil, the farmer abstracts elements of plant food.

2. Unless replaced, in course of years these elements will be so far reduced that returns will be insufficient to cover the expenses of production.

3. The average replacements made through the agency of commercial fertilizers are insufficient to maintain the original elements of plant food in the soil.

4. The difference between the elements abstracted and those returned as indicated in (3) represents loss actually sustained.

5. The loss reflected in (4) is not provided for in expenses generally allocated in the cost of producing any given crop.

A further quotation from one of the many publications written by the late Dr. Hopkins is worthy of repetition here. It recognizes the principle illustrated by the concrete examples given above.

If there is one agricultural fact that needs to be impressed upon the American people it is that the farmers of this country have been living, not upon the interest from their investments, but upon their principal; and whatever measure of apparent prosperity they have had has been taken from this capital stock.[5]

True; and the reduction of his capital represented by soil exhaustion has been invariably overlooked by the farmer. The result is obvious. The income reported for tax purposes has not been reduced by any amount representative of soil exhaustion, over and above the amount actually expended on fertilization. The difference between the latter and the loss sustained through depletion of elements of soil fertility, determined in the manner indicated in Table III, represents loss of capital. In 99 cases out of 100 there is such a difference and in those 99 cases taxes have been paid, not on income, but on capital—to the extent of such difference.

IV

Difficulty arises in the practical application of the theory. Instances are known where farm owners have deducted anywhere from \$2 to \$5 per acre from their farm earnings to cover soil exhaustion. Such deductions, restricted to one or two isolated cases, are purely arbitrary and unscientific. Up to the time of writing, deductions computed in such a manner have not been allowed by the Treasury Department. It is extremely likely that the Bureau is taking advantage of the lack of scientific determination of the amount of soil exhaustion in so disallowing an item which, in principle, it cannot fail to recognize as a justifiable deduction. Income Tax can be collected only on income, return of capital to the taxpayer is not taxable income.

The situation does not seem to be difficult of solution. It should be borne in mind, however, that the exhaustion of the soil is a gradual process. The value of the depleted elements, therefore, must be determined on a basis of average cost and not on the cost of replacement in each particular year. Reducing the question to a mathematical problem and using Table III as a guide the following computation of deductions from gross income results:

[5] The Farm That Won't Wear Out, p. 67.

1. Actual loss per acre of elements of plant food at current replacement prices..		$22.40
2. Actual loss per acre of elements of plant food at average normal replacement prices, which were, say, 20 per cent less than current replacement prices		$18.91
3. Actual expenditures per acre on commercial fertilizers replacing the following elements:		
Nitrogen 10 lbs.	$4.25	
Phosphorus 2 lbs.	0.40	
Potassium 2 lbs.	0.36	$6.76
Lime ¼ ton	0.75	
Application	1.00	
Difference, representing loss per acre due to soil exhaustion based on average replacement cost		$12.15

The foregoing difference, $12.15 per acre, would go to the credit of Soil Exhaustion Reserve account, the debit representing a direct charge against the gross income for soil exhaustion. Amounts spent for commercial fertilizers in any years and in excess of the actual requirements beyond the elements abstracted by the crop yield of those years would form a replacement of capital and, consequently, a reduction of the Soil Exhaustion Reserve outstanding at the end of such years.

It may at once be asked why, in the case of farmers who purchased their property at a rate of, say, $10 per acre, a sum of $12.15 per acre should be allowed as depletion of capital. What, however, the farmer really purchases as a farmer, is the right to make use of the elements of plant productivity in the soil to raise crops. Herein his situation is analogous to that of the mine owner who purchases land for, say, $10,000 with the right to operate a mine for abstraction of minerals beneath that land. In this case the Treasury Department allows the owner to base an entirely new valuation of his property on determination of the value of the minerals involved. This valuation might amount to $500,000 or $1,000,000 and he is allowed to recover the whole of this "discovery value" by annual depletion. The abstract principle is the same in the case of the farm owner.

V

The subject of soil exhaustion is one demanding serious consideration. The facts shown here form but a superficial presentation made merely with the object of demonstrating the principle. That the principle does exist cannot be denied and the causative results must be recognized—not only by farm owners in determining what their correct incomes may be, but equally by the Treasury Department in assessing the legal taxes due by the farm owners. The fact that the acknowledgment of the principle by the Treasury Department would necessitate the revision of thousands of tax returns already submitted and passed on should not be a consideration in the matter.

To summarize, the measure of capital loss sustained by the farm owner is the amount of the elements of plant life removed from the soil and not actually replaced. This capital loss can be determined in dollars and cents. The dollars and cents so determined are not subject to taxation. They have been taxed in the case of nine farm owners out of ten having a taxable income. Steps should be taken, where possible, to get a return of taxes illegally assessed in the past, and to insure consideration of the item of soil exhaustion in returning income subject to taxation in the future.

AN ORGANIZATION MANUAL

BY PAUL M. ATKINS* AND HAROLD F. WOOD†

IN a previous article in *Administration*[1] it was pointed out that it is highly desirable to analyze a business into its various functions. At the close of this discussion of the activities of manufacturing concerns, the statement was made that it is essential to have the definition of the functions recorded in a permanent fashion so that they may always be available for those who have occasion to be concerned with their content and limits. The form proposed for this record was called an "organization manual."

Since practically nothing has been presented to the public on this topic, and since the subject is one of such vital importance to the practical business man, it may be well to discuss the whole question somewhat briefly and to present an illustration which will serve to show the layout and the content for a particular department of such an organization manual. The particular form will vary, of course, from company to company, but it is believed that the one given in the following paragraphs represents a standard which may be useful as a guide to those who wish to prepare a manual for themselves.

For the benefit of those who have not read the article referred to above and to refresh the memories of those who did read it in regard to certain points, most of which were passed over rather hastily in that place, a brief discussion of an organization manual and the purposes for which it is intended may be in order at this point.

The function and purpose of organization charts is beginning to be recognized now as one of the ways for making clear to all the members of the concern the interrelationships which exist among them. All too often, it is true, the organization chart is either very poorly put together or else it reveals a condition in the company which needs immediate attention. However, even if the organization chart is perfect from the point of view of technique and reveals a business which has been functionalized (analyzed into its various functions or activities which are usually represented by departments) it is nothing more than a framework, so to speak, which needs to be filled out and added to before it can give its fullest service. It must not be thought from this, however, that any condemnation of organization charts is intended, far from it. A well-designed organization chart is one of the greatest aids which can be devised to promote the control of a business.

Now the framework or skeleton of a ship will give a fairly good general idea of what the vessel will look like when completed. It will even disclose certain relationships which will be somewhat obscured when the boat is finished. Anyone will agree, however, that the frame of a ship unplanked or unplated lacks a good deal of being a serviceable instrument of commerce. Just so in the case of an organization chart; it needs to be rounded out and completed by an organization manual. The organization chart shows at a glance the principal rela-

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[1] "Functionalizing a Business," by Paul M. Atkins, *Administration* for April 1922, p. 453.

tionships between the various departments or functions, but it does not give more than a very hazy idea of what the scope of each function is; this is the task left for the organization manual.

An organization manual is a reference handbook for a company in which are defined all the various functions of the business. Among the many other things to be found therein, the two set forth below are of particular importance:

1. An explanation of what is involved in the carrying on of the function and a delimitation of its extent.

2. A complete and unambiguous definition of the contacts between this function and the others with which it has interrelations.

If this is adequately done there should seldom be any question in regard to overlapping of or gaps between the responsibility and authority of the various executives who are in charge of the several departments. This should go a long way toward avoiding that function which is so detrimental to the successful operation of any business.

Care should be exercised, however, not to overburden an organization manual with too heavy a load. No effort should be made to try to incorporate in it standard practice instructions giving detailed explanations for the carrying on of the various activities in all their subdivisions. Standard practice instructions are a very helpful, in fact an almost necessary, aid in the control of the daily routine work of a business. Such instructions should be explicit, detailed, complete. Nothing should be left to the imagination or judgment of the worker if it can be standardized and made permanent in such a written form. Such a collection of instructions is almost sure to be voluminous and to be of relatively small value to those not immediately concerned with them, while an organization manual should be so developed as to be of use to all heads of departments and their principal assistants, not only in the conduct of their own work, but in their association with their colleagues.

However, as in so many other cases, an ounce of example is worth a pound of precept and before any further discussion of this subject is undertaken, a practical example will be given which will serve to illustrate many of the points brought up. It is a more or less generalized form of a section of an organization manual dealing with the functions of a planning department. The planning departments on which it is based are those of medium- and small-size concerns of the jobbing or intermittent type of industry producing goods whose principal components are metal. It is typical, therefore, of many manufacturing concerns in this country.

An Organization Manual of the A.B.C. Company

The Planning Department

1. Purpose. The planning department is organized for the purpose of controlling the productive activities of the manufacturing departments. In its broadest scope the function of this department may be defined as the efficient correlation of men, materials, machines, and orders. It is the task of this department so to organize the productive capacity of the plant as to allow effective scheduling of all orders and their routing through the factory. All matters pertaining to production are to be so planned, scheduled, and dispatched that material of the proper kind shall be available at the scheduled time and place for the initial process, and that the men and equipment for this and all subsequent processes to be performed upon this order shall be ready for the work at the scheduled time

and in the proper condition so that the work may move through the factory to completion smoothly and rapidly according to the definitely planned routing. In this manner the planning department insures the complete utilization of the productive capacity of the plant, and its operation as an effectively co-operating unit. Without a planning department this would scarcely be possible.

2. Control. The planning department is under the direct supervision of the assistant production manager, who is directly subordinate to the production manager, as shown by the organization chart. In order to insure co-operation in the control of the operating manufacturing departments the heads of the stores, tool, receiving, and shipping departments are made directly subordinate to the production manager also. This relation is clearly shown on the organization chart. The order of work of these departments is subject to the orders of the planning department as are all the manufacturing departments. This authority must be absolute in order to allow of effective control over all the productive activities.

3. Subdivision of Departmental Functions. It shall be the function of the planning department to:

1. Maintain a master schedule to assure definite correlation between sales and production.
2. Schedule all orders for production and make certain that the schedule is adhered to.
3. Make out route charts for the production of each order and see that the equipment and labor necessary for each process is available at the scheduled time.
4. Provide for a continuous flow of work for each machine, making certain that no machine is either idle or overworked.
5. Maintain a balance of materials ledger and constantly check inventories to assure their accuracy.
6. Prepare material lists, material issues, and all other papers needed for the control of material.
7. Requisition the purchasing department for needed materials in advance so as to have all material on hand at the time it is wanted.
8. Order necessary tools from the tool department in advance in order to have the proper equipment at hand at the time scheduled for the order to go into production.
9. Order, store, and issue instruction cards for the various operations to be performed on each order.
10. Dispatch all necessary orders for the carrying out of schedules and plans as arranged.
11. Control the transportation of all material and material in process to and from work centers.
12. Provide for a definite and rapid messenger service for the factory.

4. Personnel of the Department. To carry out the functions recorded above, the following employees are included in the organization of the planning department as shown on the organization chart.

1. The assistant production manager
2. Balance of materials clerk
3. Material list clerk
4. Route chart clerk
5. Order of work clerk
6. Schedule clerk
7. Instruction card clerk
8. Dispatch clerk
9. Head move man
10. Factory mail clerk

Through these men the work of the planning department is carried on. The definite functions performed by each of them appear in the paragraphs below.

5. The Assistant Production Manager. The assistant production manager is the direct head of the planning department and supervises the entire planning function. He is subject to the orders of the production manager and has a supervisory control of the other departments co-operating with the planning department subject to these orders. He shall assist the production manager in the preparation of the master schedule. He is the immediate superior of the other employees of the planning department and is responsible for the efficient operation of the whole department, its discipline, and esprit de corps. He may make recommendation to the personnel department for employment, discharge, and promotion of such employees. He has the duty of correlating the work of all the other employees of the planning department.

6. Balance of Materials Clerk. The balance of materials clerk has charge of the balance of materials ledger and the checking of the perpetual stores inventory. It is his duty to see that the proper supply of each item of material is kept on hand in the stores department, and to furnish sufficient

advance notice to the purchasing department of any need so as to allow that department to supply material for any order according to schedule. He must keep the balance of material record in such a way as to maintain the inventory at the lowest possible figure and still keep adequate supplies on hand to fill orders without delay. He shall see that obsolete materials do not accumulate and that the issues of the material used are priced for the use of the accounting department. All material issued and returned shall be charged or credited to the correct order by the balance of materials clerk. He shall be prepared to furnish a report on the condition of the stores inventory at any time it may be called for by the production manager.

7. *Material List Clerk.* It shall be the duty of the material list man to make out a material list from each production order and present it to the balance of stores clerk at the proper time to allow him to requisition all needed materials. It shall be his duty to interpret the specifications of the engineer into those as used in the plant and see that the list made out covers the material needed for the order which it represents.

8. *Route Chart Clerk.* It shall be the duty of the route chart man to take the route charts for each particular product as worked out by the manufacturing standards department and apply it to each order at hand. He is responsible for efficiently routing the orders through the factory so that equipment shall be utilized to its fullest extent and no one department or machine crowded beyond its limit. He shall co-operate with the schedule clerk in order to attain this end.

9. *Order of Work Clerk.* It shall be the duty of the order of work clerk to determine the order in which the work shall be done in the plant, paying due respect to priority and rush orders. It is his duty to see that the schedules as worked out by the schedule clerk are followed out in practice and that all work is completed as required. He should make every effort to see that there is no delay so that delivery dates may be met, and to that end has general supervision over the work of the dispatch clerk.

10. *Schedule Clerk.* It shall be the duty of the schedule clerk to prepare the schedules for each order, co-operating with the route chart and order of work clerks so that orders shall be out on scheduled time. He shall also prepare the production side of the master schedule and shall assist the assistant production manager and the production manager in co-ordinating the production side of the master schedule with its other elements.

11. *Instruction Card Clerk.* The instruction card clerk shall have complete charge of the storage and care of instruction cards. He shall see that the proper instruction cards are issued to cover the processes involved in each order and that the supply of cards is kept up to date by the manufacturing standards department. If any cards are missing for necessary processes it shall be his duty to see that they are furnished by the manufacturing standards department and are properly made out.

12. *The Dispatch Clerk.* The dispatch clerk is responsible for the dispatch to the operating departments of the factory of all orders necessary to accomplish the work according to schedule. He is responsible for the dispatch to the factory of tickets ordering the setting up of machines for operation, the time tickets for each operation upon the order, the inspection tickets at the completion of the operation or inspection. It is his duty to operate the dispatch board in the department, to insure the continuous operation of each machine, and to record all operations as they are completed.

13. *Head Move Man.* The head move man shall be responsible for the movement of all material throughout the factory, both from and into stores, and from operation to operation as dispatched by the dispatch clerk. He shall allow no material to remain upon the floor that is not in process of manufacture and shall allow no machine to lie idle because of delay in furnishing proper material. He shall be responsible for the efficient operation of all facilities for internal transportation in the factory.

14. *Factory Mail Clerk.* The factory mail clerk shall be responsible for the delivery of all orders intrusted to his care. It shall be his duty to make the rounds of the

factory mail boxes at intervals of 15 minutes throughout the day and put in each box all internal communications so addressed and take from the box all communications left therein and deliver them, on the next round, to the box of the person to whom they are addressed. He must make the factory mail service rapid and dependable.

15. Conclusion. The planning department is the nerve center of the entire plant. Co-operation with all departments with which it has contact and entire compliance with all orders it issues is essential to its success. Every effort should be made to make its records as complete and accurate as possible and to promote the hearty co-operation of all the employees in the manufacturing departments. In this way delivery dates can be met, material costs and idle equipment brought to a minimum, and production easily and accurately controlled. To bring about these savings standardized conditions throughout the plant are necessary and hence the work of this department must be co-ordinated with especial care with that of the manufacturing standards department. (The manufacturing standards department referred to in this and several other paragraphs above is that department which establishes the standards for equipment, materials, operations; makes time-studies; establishes standard routing; lays out equipment; designs new tools; decides upon quantity and quality standards; prepares instruction cards and standard practice instructions, and sets incentives. It determines the "how" and "where" while the planning department decides the "when" and the "how much." The successful functioning of the planning department means the successful operation of the entire plant.

What has been done for the planning department in the illustration given above should be done for every other department throughout the whole company, and it is just as important in the case of a mercantile or any other kind of business concern as it is in the case of a manufacturing company. When it is complete the chief executive will be in a position to know what manner of company he has, something that is true of very few executives today even though they may think the contrary.

If the various sections are symbolized in the same manner as the departments, the organization manual becomes self-indexing, and reference to any part of it is greatly facilitated. If the organization chart is symbolized in a like fashion, one supplements the other, the organization chart giving a perspective of the whole, the organization manual giving a detailed view of the various parts. A company which has both a well-developed organization chart and an adequate organization manual has laid a firm foundation for the control of all its work.

FUNDAMENTAL WAYS OF REDUCING LABOR TURNOVER

BY WALTER J. MATHERLY*

THE reduction of labor turnover is the fundamental objective in all turnover studies. In analyzing turnover difficulties it is not enough to find out what turnover is or how to calculate its rate. While such information is important, yet it, *per se*, is more or less valueless. To meet the full need, we must go one step further and devise ways and means for reducing labor turnover. Unless we offer remedies for the evils we discover, our discoveries are foolish expenditures of time and energy, and profit us nothing.

What are the ways of reducing labor turnover? The ways of reducing labor turnover are of two general types. First, we may attack the problem from the short-run point of view. We may provide temporary expedients for getting us out of our troubles. Instead of removing the causes of our derangement, we may resort to mere palliatives. Second, we may approach the problem from the long-run point of view. Instead of providing temporary relief, we may concentrate our attention on permanent relief. Instead of superficial remedies, we may focus our activities on fundamental remedies.

In taking up the fundamental ways of reducing labor turnover rather than the superficial ways, it is perhaps advisable to make a distinction between the external causes of turnover and the internal causes. The means of cutting down labor turnover arising out of these two groups of causes are entirely different. What will cure the ills outside of a given factory will not necessarily cure the ills within. The medicine must be adapted to the patient.

In removing the external causes of labor turnover, no one industrial plant can do very much. To get very far there must be co-operation on the part of all industrial plants. Except in mill villages where one company builds the houses, paves the streets, and erects the schoolhouses and the churches, no one company by itself can make the community a desirable place in which to live. To make the community attractive to the workers and develop within them a desire for permanency of abode, the combined efforts of all the companies in a particular locality are necessary.

The same is true of the workers. A few public-spirited workmen cannot by themselves achieve very great results in improving community living conditions. They must have the support of all the other workmen who make up their town or social unit. If a community spirit is developed and the laborers and their families take pride in their homes, their schools, and their churches, there will be little desire on the part of wage-earners to seek for frequent changes in employment. If there is any change at all, it will be only a change to some other factory in the same locality, and not a change due to town or community environment.

To insure the highest type of community advancement, there must be not only co-operation among the workers themselves and among the companies themselves, but also co-operation between the workers as a group and the companies as a group.

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An industrial locality cannot make very great progress unless employers and employees stand together, adopt joint programs, and carry on joint activities. An industrial community cannot exist half managers and half laborers. Unless there is concerted effort between capital and labor there is not much chance to develop attractive local surroundings. The chief need is for teamwork. If there is teamwork on the part of every one, community living conditions will improve, the workmen will tend to stick to their jobs, and the costs of labor turnover will be saved both to the employers and the employees.

Another external cause of labor turnover over which managers and laborers in a given factory have no control is the general demand for labor. Where turnover is high on account of a strong demand for workers, little can be done. The only remedy is to control demand itself. Of course under free competition between manufacturers this is impossible. When a period of rising prices comes, no one can keep employers from bidding against each other for labor and bringing about many changes in employment. Workmen naturally go to the places where they can secure the highest wages. Thus, in order to reduce labor turnover due to increased demand for labor requires the regulation of demand itself, which in a competitive society is scarcely possible.

In so far as there are other external causes, they must be eliminated, not by any one group of workers or any one company, but by all workers and all companies standing together with common aims and common purposes. Only by united effort can there be a development of labor stability in industrial centers and a reduction of labor turnover arising out of circumstances outside of the factory.

II

As for decreasing labor turnover within the factory, arising from internal causes, there are several fundamental methods which demand application. These methods may be summed up under five heads:

1. Make the work agreeable.
2. Regularize the job.
3. Scientifically adjust the length of the working day.
4. Pay attractive wages.
5. Adopt the most improved machinery for the supervision of personnel.

Foremost, perhaps, among the fundamental ways to keep men from severing their connections with the company is to make the work agreeable. It is well-nigh impossible to retain workers where the tasks they perform are inexcusably monotonous and distasteful. Many jobs are dirty and unhealthy simply because no attempt is made to make them attractive. It is folly to expect a man to toil day after day in surroundings that are vile and loathsome. Where smoke and fumes are offensive, there is no reason why provision should not be made for their removal. If ventilation is poor, it might be profitable in more ways than one to install automatic ventilating systems. If the daylight is inadequate, or if the glare from artificial light is irritating, it might contribute to the contentment of the workers to establish indirect lighting arrangements. If the hours are excessive and the work requires intensive application, labor instability might be eradicated by allowing brief rest periods at certain intervals. If the tools and equipment are antiquated and it is annoying to use them, it might pay in terms of satisfied labor force to scrap the old tools and equipment and purchase new ones.

A great many manufacturing plants are going so far as to make a careful analysis of each job. The main idea, as is well known, is to study the contents of the job and find out what its requirements are, both with respect to physical strength and mental capacity. When this is done, the results are tabulated and printed on a card in the form of job specifications. Then, when new men are employed, they are selected so as to conform to these specifications and are adjusted to their positions in such a way as to make them contented with their surroundings and turn out the largest possible output commensurate with their wages. It might be well for more industrial plants to make use of job analysis. By studying every job in detail, its bad phases may be removed and laborers may have no cause for changing their workplaces at all. At any rate, factory conditions can be made reasonably agreeable, if only the proper efforts are put forth; and a forward step may be taken in cutting down the rate of labor turnover.

III

In addition to making factory work agreeable, it is necessary to regularize it, or make it steady. Very few men want temporary jobs. The great demand is for employment that is lasting. Where workers hold positions that are insecure, they are in constant dread and their efficiency is greatly lessened. If the industries in which they are employed are subject to seasonal fluctuations, or if their jobs are temporary in character, they labor more or less under precarious circumstances and face the future every day with fear and trembling. Consequently, men working under such conditions resort to frequent changes of employment, and the result is much waste to both employers and workers.

In order to diminish labor turnover due to irregularity of work, there are three or four methods which might be put into effect. To begin with, the company might make it a matter of permanent policy to hold its entire labor force during a period of depression, regardless of costs. This could be done by providing for the use of all the force three days a week rather than by laying off half of the force and working the other half six days a week. In making this provision, the workmen would be more contented when prosperity returned and would stick to their employers out of loyalty and gratitude regardless of allurements offered elsewhere.

Moreover, the company might cut down the number of short-time jobs. There is really little excuse for such positions any way. It is not an impossible matter to adjust the business of a manufacturing plant so that all temporary occupations will be eliminated. Of course, this will depend upon the particular plant; but by careful study of the work to be done, and by wise planning as to when and how it is to be done, everything in the whole manufacturing process can be regularized. This would enable industrial managers to make every job permanent to a certain degree and dispense with the taking on of a large number of men at certain times and then letting them go just as soon as the imaginary temporary needs have been relieved.

Again, the company might devise plans for decreasing irregularity caused by seasonal fluctuations. If the concern produces goods for which there is a seasonal demand, it might standardize its commodities and manufacture for stock. By pushing its salesmen through bonuses and otherwise, it might be able to keep its output fairly normal. If this is impossible, it might

start a sideline for slump seasons. For example, where there is a slack season in automobile tires, tire factories might produce other rubber goods such as boots and shoes. It might be practical also to make two products dove-tail into each other, such as the manufacture of straw hats for the summer market and felt hats for the winter market. By the application of some such policies as these, factory work can be regularized and remedies found for much of the excess of labor turnover.

IV

Furthermore, labor turnover may be reduced by scientifically adjusting the length of the working day. How long ought the working day to be? That question can be answered only in terms of physiology and psychology. To know just how long any man should labor depends upon the physical requirements of the job and the physical constitution of the man. Not only that, but it also depends upon the psychological requirements of the job and the mental constitution of the man. Some men have almost unending physical strength; others tire very quickly and must have time to repair worn-out tissues. Some men can work at anything with very little mental strain; others abhor certain kinds of labor and go to pieces at once over monotonous routine. If the working day is too long, laborers may not have time overnight to throw off the poison of fatigue and renew their depleted energy. If the mental application is very intense, they may not have time from day to day to throw off their mental stagnation and regain their psychic equilibrium.

Industrial workers are complexes of body and mind. We may regard them as human machines. By this no disparagement is meant. The idea to be conveyed is that they are merely human organisms and as such have certain definite human needs. Unlike machines of metal, they cannot do the same amount of work each hour of the day or even each day of the week. The longer they toil the less will they produce. The curve of output decreases with the increase of fatigue. If the hours are excessive, the employer as well as the workman suffers a loss. Where the day is too long, the men become overworked, lose interest in their jobs, and soon seek for employment with shorter hours. Thus, in order to provide for the welfare of the human machines in industry and prevent their frequent removal or turnover, it is necessary to fix the length of the working day according to physiological and psychological standards.

In connection with working hours, there is also the question of overtime. Is overtime advisable? The opinion of most careful thinkers on the subject is that it is not advisable. It requires too much extra effort, lessens the working pace during normal hours, and accentuates the evil consequences of accumulated fatigue. What the company gains in increased output it loses in decreased labor efficiency, especially if it holds onto the same working force. The curve of output drops very rapidly as the number of hours worked overtime increases; and if this is kept up long enough, the workers sooner or later impair their health and productivity and quit their old positions to seek new ones. Hence, it would seem that the value of overtime is very doubtful as an administrative policy.

If overtime is of such doubtful value, what steps may employers take to decrease it? There are several steps which they may take. The first step, perhaps, is to plan and schedule pro-

duction ahead of time. This would result in the right start and prevent any delay at the beginning of the manufacturing process. The second step is to control the progress of production orders through the plant. This also would prevent delay and eradicate the need for overtime in straightening out difficulties. The third step is to require notice of resignation on the part of all who leave. This would enable those in charge of hiring to keep the factory's labor force adjusted to the factory's labor demand and dispense with any calls for overtime due to an inadequate supply of workmen. The fourth step is to eliminate tardiness and absenteeism as far as possible. This would improve the efficiency of the entire working force and remove many of the causes for going beyond the standard number of hours. If all these various plans were put into effect, there would be little necessity for working employees overtime and creating conditions in which they are more or less encouraged to resort to frequent changes in their jobs.

V

The next fundamental way in which to reduce labor turnover is to pay attractive wages. Of course, this may not be possible, if by attractive wages high wages is meant. Some employers may be so near the margin that they cannot afford to offer higher wages in order to retain their employees. In essence, the problem is not so much the payment of higher wages as the payment of satisfactory wages.

What are satisfactory wages? What factors should be included in a fair or attractive rate of pay? Without attempting to go into the far-reaching economic effects, we might say that the factors to be considered in determining a fair or attractive rate of pay depend upon the job or work in question and may include several or all of the following items: The cost of living; the amount and quality of output; the kind of skill required; the physical and mental requirements of the task; the risks or hazards of the job; the disagreeable character of the work; the possibilities of advancement; wages in the community and in the industry; length of service; and the amount of profits the business is able to make. The relative importance of each of these items needs to be determined scientifically and included or excluded, depending upon the nature of the work for which the fair wage is to be fixed. By carefully weighing these various elements, a system of wage-payments can be worked out which will be satisfactory to the management as well as to the working force.

In any successful wage system, there must be equity and justice and such equity and justice must be accepted by the laborers. In fixing wage scales, the workmen must be consulted and an attempt made to co-operate with them at every point. The rates of pay adopted must be fair to the beginner and the slow worker, but must not penalize the fast or superior worker. The central idea is to establish wage standards calling for variations in amount according to the rates of performance. The company that refuses to follow such a policy as this or some similar policy and tries to beat wages down to the lowest possible levels without paying any attention to the attractive wages offered by its competitors will sooner or later experience great difficulty in holding its men and will be afflicted with the evils of a high percentage of labor turnover. On the other hand, the company that makes an honest effort to pay satisfactory wages and establishes a reputation for square

dealings in wage matters will find its workers sticking to their jobs and will reduce its turnover to a minimum.

VI

The final fundamental way in which to reduce labor turnover is to establish improved machinery for the supervision of personnel. While this is put last it is by no means least in importance. As a matter of fact, it perhaps ranks first. If improved methods for handling personnel are adopted and a personnel department is created to apply such methods, it makes it possible to put into effect much more easily the foregoing ways for the reduction of labor turnover. At any rate, a personnel department with scientific personnel standards is one of the major considerations in present-day industrial administration.

The need for a personnel department is almost self-evident. Under the modern factory system of production, the owners and the workers are widely separated. Even the representatives of the owners are not very close to the labor force. There is no direct personal contact such as prevailed under the simple domestic system. Everything is more or less impersonal. Employers do not get to know employees, and employees do not get to know employers. Such conditions give rise to friction and misunderstandings, and as a result, industrial unrest and inefficiency ensue. The only remedy for this state of affairs is to provide a personnel manager who will become co-ordinate in his activities with the production manager, and who will restore the personal touch in industrial operations which disappeared with the appearance of modern capitalistic production.

Realizing the necessity for bringing employers and employees closer together and minimizing labor turnover arising out of the impersonalism of the industrial system and other causes, a great many industrial plants in the United States during the past six or eight years have installed such personnel managers. What are the principal functions performed by these personnel managers? While it is impossible to discuss them at length in this article, the principal functions are:

1. The careful selection of employees.
2. The induction of the workers into the factory service.
3. The working out of systematic methods of training.
4. The devising of plans for promotion.
5. The investigation of those who leave or terminate their employment.
6. The supervision of discharges.
7. The control of health conditions.
8. The administration of welfare service work in general.

In other words, personnel managers are human engineers, occupying more or less the same relation to human machines as chief engineers occupy to non-human machines.

Wherever personnel departments have been established with high-class men at their heads, they have justified their existence. Almost immediately there has been an appreciable decrease in labor turnover. The reason for this is easily seen. Where applicants are wisely selected and carefully placed, many unfits are culled out to begin with, and those who are chosen tend to stick to their jobs and become permanent workers. When the laborers are trained and given opportunities for promotion, they are better contented and make more efficient workmen. If those who quit are investigated, a great many causes for dissatisfaction may be discovered and such causes removed, thus preventing further leavings in the future. If there is a wise and sympathetic man, in whom the workers have

confidence, to supervise the human factor in industrial processes and act as a sort of go-between for employers and employees, many labor difficulties are smoothed out at the beginning, workmen render a more efficient service, and the losses due to labor turnover are saved to labor, to capital, and to society in general.

VII

The fundamental ways, then, to reduce labor turnover are of two general kinds:

1. Those which will remove the external causes of labor turnover.
2. Those which will remove the internal causes.

Under the first head come those methods which are the results of co-operation between all employers and all employees. One or two companies or a few individuals cannot do very much. There must be concerted effort by all those interested. Under the second head come the means which every industrial plant can make use of within its own gates. Such means involve making the work agreeable, regularizing factory production, scientifically adjusting the length of the working day, paying fair or attractive wages, and establishing improved methods for the administration of personnel. If these various steps are taken and if sincere attempts are made to make them effective, labor turnover will be reduced to a minimum, the productivity of labor will be increased, and the administration of industrial plants will be raised to higher levels of efficiency.

CROP CONDITIONS AND THEIR EFFECT ON BUSINESS

ARCHER WALL DOUGLAS*

THE results of each year's harvest determine in large measure the course of business, not only for the remainder of that twelve months, but also for much of the following spring, since it takes that time for the year's farm production to find a market. So at present we have very definite data upon which to forecast the likelihoods of the near future.

In the grain region, particularly in that section lying north of the Ohio River and between the Appalachian Range and the Rocky Mountains, there is an abundant harvest of food for man and beast. It is not in the nature of exceptional yields of any one or more commodities, but of a general sufficiency that more than supplies our needs in every line.

It was a harvest that, from its conception last spring, was not only pursued intelligently by the farmer, but was made in the most economical manner possible. There is no failure, nor even shortage, in any production, and though the individual states differ from each other in the fullness of their production, there are no commonwealths where short crops are more than sectional and partial. Such sectional differences are purely the results of a summer rainfall that departed from its usual code, and fell where it listed, rather than where its reputation for impartiality suggested.

With much feed and forage, there goes along the natural accompaniment of an increasing number of livestock, generally in good condition.

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These things have often happened in the past in times of good harvests, and do not need dwelling upon save that they are accompanied by other matters that tell of something more than the good fortune of a great yield of the fruits of the earth.

The fundamental matter is that the farmer has collectively come to realize that farming is not only a business and one requiring the utmost industry and intelligence to make it a success, but that it is also the greatest business in all the world and as such must be in the forefront in every phase of modern endeavor. That is why the intensely individualistic farmer has not only organized co-operative associations, but has stayed organized for the first time in modern history with much general benefit to himself. In the state of Iowa, for example, about 27 per cent of all livestock shipments are handled by farmers' co-operative associations. In this same state the individual farmer is carrying out the idea that farming is a business by buying more farm equipment, building more silos, more barns, installing more labor-saving appliances, and putting his producing plant in better shape to turn out farm products more efficiently and more economically.

The farmer has further aroused the consciousness of the nation and the banking world to the fact that his business is entitled to adequate financing, the same as any other business, and that such financing should recognize the peculiarities of his calling. He is consequently much further along in having discharged his obligations

than at this time twelve months ago, and in much better position to buy the things which he needs and has denied himself so long. In every way he has "consolidated the positions he has won," as they said in trench warfare, and the results of this year's harvest represent not only its passing benefits but finds the farmer much in the position of the conservative manufacturer who has charged off all losses and mistakes. He is, therefore, far better fixed to do business than ever before.

One thing the farmer has yet to learn and practice as far as circumstances permit, is to regulate production to prospective demand, as every wise producer seeks to do. Of course he will have to do this without regard for those timid souls to whom such a course is flat burglary, and for whom the farmer exists principally as a benevolent philanthropist to furnish cheap food and clothing for the benefit of mankind. How this lack of control works may be seen from the fact that the farmer did not appreciably reduce his acreage of corn this season though there was already on hand the carry-over of much of the two preceding years' production. This is the principal reason for the low price of corn today, when it takes two and one-half bushels to buy an ordinary pocket knife.

There is no question but that farming has made substantial advances since last fall when it was in dire distress, though during the past two disastrous years there may be localities here and there which have yet to liquidate indebtedness incurred. In the last analysis, the nature and volume of business this fall in the grain regions will depend largely upon the price the farmer receives for his products, that being the measure of his purchasing power. In the grain regions of the country he numbers about 40 per cent of the entire population.

It is easy to see, therefore, what a fatal delusion it is to hold that advances in the prices of commodities are a sign and consequence of a demand that forecasts an early return to prosperity, unless these advances include farm commodities in their general scope. The real problem of the time is that general co-ordination of prices which alone can usher in an enduring prosperity. Otherwise we shall again be up against a buyers' strike such as paralyzed business during the past two years.

II

The Cotton Belt is another story and one where high prices of the principal product, cotton, is the only way out of the troubles which have encompassed the farmers and planters since the fall of 1920. In the grain regions much of the product is consumed on the farm, being fed to livestock, so that its market price is less important than its volume, whereas cotton is entirely a money crop and its sole value is accordingly the total sum it brings to the producer. So true is this that more than once the South has been brought to the verge of bankruptcy by reason of an enormous yield of cotton, so great in fact that no adequate market, domestic or foreign, could be found for it, with resultant prices below the cost of production. And yet the chief advice that the farmer gets from the theoretic economic world, since there can be no overproduction only underconsumption, is to produce up to the limit of his capacity, and thus stimulate business by furnishing cheap food and clothing to the consumer and the wage worker.

This season the southern planter and farmer is raising food for himself and

his flocks in great abundance so that he will not have to go to the granaries of the West for provender, for in this respect he is self-sufficient as never before. He has raised the cheapest cotton crop ever grown denying himself everything but the barest necessities of life, for the disasters of the past two years stripped him of his ready cash and brought his credit with bankers and merchants down to the vanishing point. Necessity drove and he had no choice. He also eked out his income in many sections by a production of fruits and vegetables such as the South never before brought forth. Then, too, he is steadily increasing his flocks of chickens and herds of dairy cows that bring him a daily trickle of unfailing cash. In southern Mississippi, for instance, the dairy business has increased 500 per cent in four years. These are some of the ways of diversification in the South.

The cotton crop had everything happen to it that could happen and still have it survive. It was planted in a wet spring when it rained day and night, and in many sections was washed out and replanted four and five times. Then came the boll weevil in incredible numbers; then more rain; and later in some sections in the southwest a fierce drought accompanied by exceedingly high temperatures which still perseveres at the present writing. Yet there will be more cotton than last year but it will be in spots—here a little and there a great deal—and even now no man may safely distribute the good spots nor separate them from the poor spots where production will be scant. For the depredations of the boll weevil are not yet over, nor are the visitations of unkindly weather, and the early frosts are still to be reckoned with.

The matter of most moment to those interested in cotton is the world-wide situation of a small carry-over from last year, with a domestic and foreign demand that on the whole promises more volume than for the first six months of this year, and the cotton manufacturing world looking to us for its principal source of supply. Meanwhile there seems no likelihood of our producing a crop that will fully answer all adequate needs. This, too, despite possible falling off in demand from Central Europe, and the reduced call for cotton fabrics which may result from higher prices.

When all has been said, there seems to lie ahead for the South that has cotton to sell an immediate future that will recompense it for all misfortunes.

Broadly speaking the prosperity of the South will be reflected in greater or less extent in every other section of the Union, for no part of the country lives to itself alone.

THE FINANCIAL SITUATION

BY H. PARKER WILLIS*

WITH the ending of the strikes in the coal industry and with the prospective early termination of the railway strike, on the basis of an agreement announced on September 14, the business situation enters the autumn season free of serious menace. This change for the better promises to be made good, even if the actual closing of the rail strike should prove to be a slow process in the official sense. The railroads had already decided to get, or in some cases had succeeded in equipping themselves with a staff of men drawn from any available source and trained for the purpose of supplying an adequate operative and repair force, while the terms of the proposed settlement should remove all further obstacles. Eventually, the country will get over the effects of the strike; costly and disturbing as they have been, and the perception of this state of things is clearly reflected in a better financial tone and in a more encouraging outlook upon the future. September must be counted a month of reconstruction from nearly every business standpoint; and, although progress in the foreign field has been very much less noteworthy, it is true that even there the beginnings of a more wholesome outlook are to be observed.

II

The Securities Situation. It was notably true during the month of August, that securities held their own despite the unusual difficulties and discouragements to which they were subjected. Many who had predicted serious recession were wholly refuted. The business recovery which has taken place during September has not been reflected in a corresponding advance in securities, because there had been, at the outset of industrial difficulties, no decline proportionate to the discouragements which had occurred as a result of the strikes. Whether this maintenance of value was due to financial "support" of a professional kind (a belief entertained by many), or to conservatism on the part of holders, it was nevertheless present; and it would, therefore, be unreasonable to expect advances to occur merely on the strength of the termination of the controversy. As a matter of fact, the recent advance in securities, although at times noteworthy in some given issue—or even in a small group of railway issues—due to improving prospects of traffic, has not been very pronounced. *The Wall Street Journal* bond index gives a figure of 76.80 for August as compared with 75.44 a month earlier; and the figure for September will not show very different results. Exceptions to this general stability are to be noted in the case of foreign bonds to which a more complete reference will be made a little later.

As for stocks, the effort to move them up continued during the early part of the month but was shortly followed by a more or less general reaction. Recession has ruled during the latter part of the period. With all the possibilities of manipulation, and in conditions as uncertain as those which now exist in the world, he would be a rather courageous man who would un-

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dertake to predict the arrival of a "turning point" or "stopping-place" in securities prices. Many factors, however, combine to suggest that for the present moment, advances in stocks have gone about as far as there is any good warrant. In the railroad group, prices are now on the average nearly 20 points higher than they were six months ago, while the values at which they are selling appear quite fully to have discounted the earnings possibilities allowed under the transportation act. There are a few roads to which this generalization does not apply. They are lines in which some plan is on foot for the splitting off of their coal or oil properties, or for recapitalization; or they are very "low priced" roads in which there is a good chance of speculative increase in value, due to the fact that the lines apparently have an opportunity to get back into the dividend-paying class. On the other hand, there are not a few that have been pressed close to the brink of disaster by excessive strike costs and other disturbances of their equilibrium. One such—the Chicago and Alton—has gone into the hands of a receiver during the recent weeks, and it is yet to be seen whether a similar result may not be suffered by some others, while there are a good many roads whose balance sheets will show up rather badly when the consequences of the strike are fully manifested there.

III

Outlook for Industrial Securities. Among the stocks of industrial properties, the situation is a little different. There is, of course, no limitation of earnings resulting from government action of a positive kind, and in a few fields of business it seems quite probable that decidedly higher values may be realized, as we noted a month ago. The distributing stocks have been, on the whole, well absorbed, during the past month, while there has been in the main, an increasingly confident attitude toward steel shares, particularly in view of the announcement that the attack on the proposed steel merger meditated by the federal trade commission is likely to be abandoned. Railroad equipment stocks have shown great strength, because of the confident belief that the roads will need to place large orders with them. But certain of these stocks have already reached heights which seem scarcely likely to be much surpassed in the near future, and some are already declining, at least for the moment.

The continued strength of the building boom all over the country, as well as other elements in the business situation, has confirmed the belief that the prices of raw materials will advance, and that such items as copper will go much higher. This has naturally tended to sustain the stocks of these companies, and probably with good reason. But, taken as a whole, there is an increasingly positive opinion that they have about anticipated the business developments of the early autumn; and that, before they go much further, there should be some more definite fruition in the shape of earnings to warrant fresh advance. Heavy offerings of new securities ($222,000,000 in August or about 20 per cent more than a year ago) of course act as a limiting influence.

IV

The Money Outlook. There is, of course, a very strong speculative clique, whose desire it is to create a belief in higher prices. The public has not "come in" as strongly as it had been expected to do, and there is still a great deal of stock to be "distrib-

uted," as well as many issues of bonds which various houses want to launch upon the market. The quantity of foreign bonds which has been dammed up, and prevented from getting into the market by strike and other unfavorable circumstances, is believed to be enormous. A receptive condition, or as the physicians would call it, a favorable "diathesis" is most desirable, and in order to produce it much work is being done in the direction of showing that "money" is not only cheap today but pretty sure to remain so. In fact money has been very near low point during the past month. Call rates have normally fluctuated around 3½ or at times 4 per cent with time money at 4 or 4¼ per cent. At the beginning there had been a slight advance, preceding and following the usual dividend and interest requirements, later followed after fresh reduction by advances to 5½ and 6 per cent.

In the credit outlook, there is no reason to expect any immediate change, but certain factors already portend the coming of new conditions. The federal reserve system at length reports an increase in the portfolio of bills held, which is now around $650,000,000. This is an appreciable increase over the summer average and has been accompanied by a slight falling of the reserve ratio. These facts, although not directly influential in the market, suggest that, at an early date, there may be a considerably heavier demand for reserve funds, or in other words that it may not be long before the "slack" is taken up in the present credit situation through the making of loans by banks which will practically use up such available funds as they have to dispose of without resort to reserve banks. Of course, an increase in the direct demand upon reserve banks may be expected to follow hard on the heels of any such alteration of conditions at member banks. Meantime reserve system rates of interest have remained unchanged, and there is no immediate reason to expect any material modification of them.

It is a regrettable fact that in the federal reserve system the central bank rate has usually followed rather than led the market, thus reversing the situation which for many years has existed in Great Britain—the classic country of scientific banking. It should always be remembered that, at any time, the great stores of gold held in reserve banks may be called upon for possible extension of aid in the rehabilitation of Europe on monetary systems, so that there is another and important factor which may, at almost any moment, come into play to influence the money situation here. Even without this, we are, of course, entering the autumn—a period in which a seasonal upward swing of demand for bank credit may be expected to occur. In fact, evident indications of such an upward swing are already apparent. The country is exceptionally strong in a banking and financial way, and the steady liquidation of frozen loans which has gone on during the past summer and early autumn, has largely helped conditions in the interior. There is no reason to doubt that ample funds will be available for all possible needs; but the measure of these needs, and consequently the extent of the strain which they will bring to bear upon the resources of the banking system, cannot be estimated with anything like the usual degree of accuracy yet the tendency is toward higher levels.

V

The Movement of Prices. A great deal depends in the present situation

upon the movement of the prices of commodities—a factor much talked of but seldom given its true weight. The movement of such prices has itself been exceptionally interesting since the beginning of the year. Starting with a level of about 140 (the low point after the war peak of 272 reached in May 1920) prices tended fairly steadily to advance up to the beginning of summer. Then there was an evident hesitation, and now the latest returns, representing conditions for early September, show a moderate renewal of the upward trend. The question how far this upward movement of prices is likely to go depends, as usual, upon a limited number of factors whose nature individually is well known, but whose exact permutations and combinations with effects of resulting complexity are manifold.

Several factors are tending strongly to put prices up. There is an unquestioned labor shortage, by which is meant that with present plant capacity, and with present acreage under cultivation, there is hardly sufficient labor to operate on "full time" or at top level. This has resulted in a movement toward renewed wage increase, with great diminution of unemployment. The outcome has been a decided increase in buying power and in trade activity. Here we have the conditions which make for higher prices, reacting again in the form of higher wages and again in higher prices still. On the other side is the fact that, thus far, our banks have been conservative, at least for the most part, and that there has been relatively little credit inflation.

The "gold inflation" so often spoken of during the war has continued, so that we are not free from this element in the price situation, but at all events the banks have not shared in the nascent inflation movement as much as they often have in the past. Some, indeed, have apparently sought to restrain unwise uses of commercial credit and have had a fair amount of success. Price fixing organizations have, however, since the war, had much greater power than ever before, and in some lines of goods, they are evidently determined to advance values. Already, prices in steel products and in various lines of consumable commodities including textiles have been sharply advanced.

A restraining price influence is seen in the fact that we have done all we can to cut off foreign demand by arranging a tariff bill whose purpose it is to prevent purchases abroad with the resulting importations. Hence the ability to force prices up at home is somewhat restricted; a fact well illustrated in the case of sundry food products whose owners are well represented in Congress and who have received all of the legislative relief they could expect, but who nevertheless find their values going down or barely stable, rather than advancing. Indeed, the decline of some of these products has been the factor which has prevented the wholesale price index from showing a greater increase, as it would have done under the influence of the rise in manufactured goods had not offsetting conditions of the kind just referred to prevented such a change.

With prices stable for the past month or two, the amount of money needed by an ordinary business concern to carry on its operations has not been increased, and consequently those which were previously in a fairly independent position have not been obliged to resort to the banks. On the whole, however, it is difficult to see how a somewhat further upward movement of commodity prices can be resisted. There are many rather

short-sighted reasoners who regard this as the best of all reasons for believing in higher prices for stocks and bonds—a belief which would be put to rout by a study of financial history during the past few years.

VI

The Government and the Market. Ordinarily, government finance and government rates of interest afford a very good criterion of market conditions. During the past month the value of this criterion has been somewhat diminished notwithstanding the announcement of a sale of $200,000,000 certificates at 3¾ per cent, the lowest rate since the war. The defeat of the soldiers' bonus, after its adoption by both House and Senate, has naturally relieved anxiety as to government securities and has overcome a recession, which had occurred in the value of most issues of Liberty bonds. Announcement that receipts from the income and profits tax during the fiscal year ending June 1922, have amounted to about $1,200,000,000 less than during the preceding year has naturally been discouraging and amply bears out the prediction made by Secretary Mellon not long ago that there would be a deficit of at least $500,000,000 during the current fiscal year. This the President raises to $650,000,000. It will be a rather fortunate condition if the country does not find itself obliged to submit to another increase in taxation or the development of some new sources of taxable revenue. A decline of about 35 per cent in the principal sources of income is, to say the least, a warning; particularly as it has been caused only in small part by changes in tax rates.

There has been but little check to public extravagance indeed, in some lines such extravagance has increased within the past year or two. In such circumstances, the government's power to borrow cheaply indicates very strong confidence on the part of the public in its ability to raise new revenue if necessary, but the Treasury has been wise in not attempting, under existing conditions, to carry into effect any further financial plans of importance. With the bonus disposed of, the Department can now place its long term financing and is reported to have some far-reaching projects in view.

VII

Foreign Situation Dubious. The other side of the general financial outlook is seen in the prospects of our foreign trade, and in the different financial aspects of that trade. No progress has been made, so far as there is any outward indication, by the World War Debt Funding Commission at Washington. The French financial delegation has gone home, apparently without immediate work accomplished. There is promise that Great Britain will begin the payment of interest on her debt on October 15, 1922, but that is the outcome of her own decision, and the question remains whether she can keep up the payments if our tariff restrictions on international trade should prove too oppressive.

Abroad, the long-drawn negotiations between France and Germany resulted, just at the beginning of September, in a tentative adjustment, whereby the German reparations payment then due was to be turned over to Belgium in the form of German Treasury notes. A parallel plan for the reconstruction of the French devastated regions has been put forward, with apparently a prospect of success, and the two things together have resulted in improving exchange

conditions quite materially; the value of marks and francs which had reached very low levels reacting distinctly. Of course, the downward movement of these two units had had a very bad influence upon quotations of French and German securities, whether stated in dollars or in home currency units. The improvement in exchange has materially helped the quotation, particularly of French bonds, both government and municipal, and has brought a more hopeful aspect into the situation.

Notwithstanding all this, it still remains true that all that has been done has been to put off for a little the arrival of a time when a reckoning must occur. German currency is going the same way as Austrian and Russian, and seems likely to continue to move along that line. This state of things reacts unfavorably upon the United States. It has already considerably limited the sales of goods which we had hoped to make, and has prevented our banks from extending credits as they would otherwise have been glad to do in the promotion of sales abroad. In other ways, also, it has considerably discouraged operations which are dependent upon at least a measure of prosperity in foreign countries.

VIII

General Conclusions. The developments during the past month have undoubtedly strengthened the belief in the innate power and prosperity of the nation. The government's September 1 crop report showed a total estimated value of $6,600,000,000 for the principal agricultural products. Spring and winter wheat are well above the 10-year average of condition; and, while cotton is low, the price is high, so that a large monetary return to the grower is assured in the aggregate. The great economic question now is whether the nation shall be allowed or encouraged to push on into an epoch of inflation. Some factors hold it back—notably the condition of other countries. Some factors tend to push it forward, among them the operations of various speculative cliques, the tendency to price fixing, and the recurrence of natural demand in an unusually strong form due to a variety of influences.

At present, as stated, the tendency of commodity prices is upward. The stock market is hesitating temporarily, with a drift toward lower quotations, and this both in stocks and bonds, although much more markedly in the former. Wise investment analysis shows that both stocks and bonds at present values represent quite fully the worth of the properties for which they stand. Cheap money tends currently to encourage speculation, but there is an increasing number of factors which tend to stimulate the belief that this cheapness of money will not last indefinitely and may begin in the near future to disappear. There is abundant reason to hope for solid prosperity in domestic trade and the chief dangers in sight are those of overdoing and overexpanding.

EDITORIAL REVIEW

ABOUT THE BUDGET

Administration, as announced in the August issue, has arranged for a number of articles on business forecasting, and, more particularly, on the preparation and use of the budget. When this series was suggested, objection was raised that business forecasting was already well understood and generally employed; that the budget was in common use, and the manner of its preparation and its applications a mere matter of routine; and that the suggested discussion would not, therefore, be of practical value.

To discover the real conditions a brief questionnaire was sent out to:

1. A number of prominent public accountants in various parts of the country.
2. To a list of prominent business concerns which were presumably using the budget and familiar with budget conditions.
3. To a list of business concerns smaller than those of No. 2, but still sizable, active, and progressive.

None of the smaller concerns responded. Apparently they were not sufficiently familiar with the budget to appreciate its importance and its possibilities.

About 20 per cent of the larger concerns replied. Their letters, however, showed that the budget was not in general use, and that its value as a business guide and "pace-maker" was not fully understood.

Practically every accountant written to responded, evincing great interest in the subject and approving a detailed series of budget articles for *Administration*.

* * *

The questionnaire sent to the business concerns inquired as to the employment of the budget by the particular concern, its utility, and as to the extent of its use among any other concerns with which the parties addressed happened to be in contact.

All of the replies received evinced much interest in the subject.

One of the large cement companies of the country writes as follows:

> In reply to your letter of inquiry about the use of the budget system, wish to say that in our own company a budget is used only in connection with our advertising appropriation.
>
> From what I can judge from my knowledge and observation, I should say that the budget method is used little, if at all, in the cement industry.

A large manufacturing company, producing a very diversified product in the electrical field approves the proposed series of articles as "of great interest and benefit." Its letter, however, states:

> For our part, we have never attempted to compile a budget except in a very broad and general way, chiefly on account of the difficulties presented by the character of our product, involving as it does a wide diversity of individual articles, which require a multiplicity of operations and parts.
>
> We are sure that articles such as you have in mind would bring out information of value not only to us but to many other concerns, who may perhaps be similarly situated.

From the Challenge Machinery Company of Grand Haven, Michigan, manufacturers of printing machinery on a large scale, comes the following interesting letter:

> A series of articles, describing the budget as a modern and efficient aid in management, presented to the readers of *Administration*, should be interesting and of real practical value.

This company uses and finds the budget invaluable for cost accounting purposes, an efficient aid in production control, and of great assistance in the consideration of selling prices and sales policies. We have been watching advertising and selling costs very closely of late, and in this connection our budget acts in a similar capacity to the governor of an engine.

The most complete and detailed statement of budget conditions is given by the Packard Motor Car Company of Detroit, Michigan, which is using the budget scientifically and in most effective form. As stated in the treasurer's letter:

We do not believe that any manufacturing institution or business of any size can be intelligently and profitably operated without a careful and definite effort made to plan in advance manufacturing and selling operations, and to standardize in so far as is possible all operations of the business, whether of a productive or non-productive nature.

The general budgetary procedure in the Packard establishment is outlined as follows:

1. A manufacturing schedule is decided upon, and is used by the manufacturing department as a basis for ordering the necessary materials, which are divided into four classes according to the length of time necessary to process or assemble, and deliveries are cited on purchase orders given to vendors to coincide with this schedule.

2. The treasurer's department prepares a financial estimate, based on the manufacturing schedule, which indicates from month to month the receipts from shipments and the expenditures necessary for labor, materials, and expense.

3. A study is made of each factory producing department, and the non-productive force necessary to operate it is definitely set, and the expense of operating the department, exclusive of productive labor, is determined.

4. All operations in the productive departments are time-studied, and the number of known hours for given production determined.

5. At the beginning of each fiscal year, the heads of the administrative and selling departments are requested to submit estimates of the expense of operating these departments for the coming year, and these estimates are carefully studied, the total put in line with anticipated production, and budgets set for the year.

* * *

An accountant in active practice should be more familiar than anyone else with the use of the budget in his territory, and with its practical importance in business. The questionnaire sent to the public accountants was therefore regarded as of special importance. They were asked:

1. As to the extent to which the budget is used in business

2. As to the completeness and scientific nature of this use

3. As to the importance of this use

4. As to the advisability of the proposed articles in *Administration*

As stated, practically every accountant written to replied. Without exception every one agreed:

1. That the budget is not in general use in business

2. That where used it is seldom in such complete form as to give the best results

3. That its use in business is of the greatest importance

4. That the proposed series of articles would be of both interest and value to the readers of *Administration*.

The letters received are all interesting and worth while but are reproduced here only in part because of space limitations and because of the repetition involved, where various phases of the subject are treated by different writers in much the same way. The letters undoubtedly give a true presentation of the attitude and opinion of the accountants of the country in regard to the budget.

As all those writing are certified public accountants, this fact is not mentioned in connection with the individual names.

* * *

If the budget were in general use in any part of the country, it would be reasonable to expect to find it in the East. The letter given below, written by J. S. M. Goodloe, of Loomis, Suffern and Fernald, New York City, while a very interesting statement of budgetary conditions, does not indicate any widespread use of the budget in this territory.

1. I do not find that business organizations as a rule are using the budget in a well-developed and scientific way. Some attempts are being made in this direction but such concerns are unfortunately in the minority.

2. The corporations with which I am familiar which are using the budget system do not in general carry the matter out sufficiently in practice to obtain the best results.

3. Any of the corporations whose activities extend beyond the personal control of the executive officers will be substantially benefited by the adoption of the budget plan, provided that it be based not only on past experience but on a general plan laid out along broad and constructive lines, having in mind contemplated conditions and extensions to the business. One of the criticisms of the plan of operation of some corporations with which I am familiar which have heretofore attempted the use of the budget plan is that they do not hold "post mortems" for the purpose of determining wherein the original budget was defective and either over- or underestimated the actual requirements.

4. A series of articles treating in detail with the preparation and operation of budgets from the various departments to the completed financial statements would, I believe, be of great assistance to corporation and business executives.

The following statement from F. H. Hurdman, of Hurdman and Cranstoun, New York, agrees with Mr. Goodloe in his general position:

I do not find business organizations using the budget generally in a well-developed and scientific way.

I am heartily in favor of the budget system, as in my opinion it is next to impossible in this day of large business and keen competition to conduct any business successfully unless careful planning is done with a view to forecasting future business and the amounts to be expended by each department in conducting that business.

I believe that an extended series of articles, treating in considerable detail the preparation and operation of budgets and emphasizing the value to be derived from such a procedure would be very beneficial to business organizations.

* * *

From the West comes the same report. The letter reproduced in part below is written from Kansas City by Page Lawrence, of Haskins and Sells:

1. I do not find business organizations generally using the budget method, and certainly not in a well-developed and scientific way.

2. Forecasts of conditions are made in a most unscientific and empirical way, and largely such forecasts remain always in the minds of the executives without any definite expression.

3. The budget has a very definite place and value in business organizations. So much, however, has been written about the budget plan or method which has been confusing and uninformative that the ordinary business mind does not appreciate the use of the budget and has an abortive idea of how to go about the establishment of a budgetary control. Common sense dictates an affirmative answer to the proper use of a budget for almost any business organization.

4. My answer to question (3) answers question (4) in that I do think that there is definite need for an extended series of articles treating on the preparation and operation of budgets from departmental to complete income and balance sheet estimates. In talking with clients the im-

pressive reaction is always that the client does not understand the budget except perhaps in its simplest form, and if budgets are made they are not correlated with the books of account in any manner.

In Chicago much the same conditions obtain. The statement which follows is written by David Himmelblau, of Arthur Anderson and Company. Mr. Himmelblau's experience as an accountant is extended and the concluding paragraph of his letter is therefore particularly striking.

I have found very few business organizations using the budget in a satisfactory manner. There can be no question but that a budget properly established and carried out would be of great value to any business organization to which it is applicable. To accomplish this a better understanding of what a budget really is and the necessary requirements to its establishment and maintenance must be had. If a series of articles is to be prepared it would seem that considerable attention could be given advantageously to the methods to be followed in the establishment and operation of a budget.

In my observation I have seen but two or three budgets giving satisfactory results.

The interesting letter which follows, also from Chicago, is written by W. B. Castenholz, of William Castenholz and Company:

The following answers are based upon my experience in the public accounting field:

1. The budget is not used generally by business organizations in a well developed and scientific way.

2. Those concerns which have made occasional use of it have done so for the purpose of securing bank loans, refinancing or other extraordinary purposes.

3. The paramount value of a budget appears to me to be the fact that it acts as a pace-maker, setting standards to which all functions of a business aim to live up to.

4. I thoroughly believe that there is a crying need in business organizations for scientific enlightenment as to the purpose and objects of budgets.

I believe that the budget should be carried out to the logical conclusion, i.e., the preparation of estimates of profit and income statements and balance sheets. While undoubtedly the departmental budgets are of great value, it is only through the forecast of income statements and balance sheets that a picture of the whole can be obtained.

* * *

Coming back to the East, the letter from R. D. Willard, of Robert Douglas and Company, Boston, which follows, throws some interesting light on the subject of the budget and its use, and agrees well in its general conclusions with the letters already quoted.

The use of the budget has not, at the present time, developed to such an extent that it may be considered general. To be sure, a large number of enterprises have accepted the idea in its primary stage and with some elation point to the fact that they are using it. A careful analysis of the situation, however, usually discloses one of two conditions existing, either of which tends to defeat the benefit which might be expected. An estimate may have been prepared in great detail only to be cast aside when operations with actual expenses are started, or no furthur use may have been made of it other than to attempt to forecast the final result.

There are today certain classes of manufacturers who must of necessity prepare an estimate of expenses for the future and determine with a reasonable degree of accuracy what result will have been attained at the end of the period. These concerns without doubt are using the idea in a practical way, but have been brought to this position through force of circumstances rather than of their own volition.

There never has been a time in the history of America when a knowledge of the cost of doing business has been so vital as it is today. Expense is a part of the cost of doing business and as every element of expense is definite in amount, the details can be prepared in advance. This being a

fact, therefore, it becomes one of the fundamentals and when named is the budget.

The difficulty which is encountered whenever the subject is approached is lack of understanding. Those who would benefit most through the adoption of a budget plan have, as a general rule, only a vague knowledge with respect to its details. A definite and carefully planned program of education would without doubt accomplish a great deal toward a general acceptance of a fundamental which at the present time can be realized only through the school of experience and a survival of the fittest.

A very complete statement of budget conditions was sent in by W. T. Sunley, of Chicago, The Educational Director of the International Accountants Society. It can only be quoted in part.

I have encountered the budget in nearly all the possible stages of its present development from the mental notes of the man who carries his plans under his hat, to elaborate records of anticipated financial position with all its supporting detail of interim history; and yet because the use of budgets is in the early stage of development, I find it somewhat difficult to decide upon a satisfactory answer to your first question. I feel, however, that it would be fair to say that business organizations generally do not at the present time use budgets in a well-developed and scientific way.

In my opinion the budget is an essential working guide in controlling organization activities. It serves the dual purpose of an ideal to be attained and a plan of procedure to be followed in attempting the accomplishment of the desired result.

It serves as a quick check against contemplated action which may be taken with disastrous results; it serves as a measuring stick for performance, and as a spur to greater achievements.

Its most essential use, however, is that of a map for charting a contemplated course.

In handling the subject of the use of budgets, I believe a distinction should be made between that portion of the budget which represents estimates predicated upon factors already known and estimates predicated upon quotas or other estimates. Some classes of enterprises have a splendid opportunity to prepare estimates based on known factors, whereas other types are compelled, because of the very nature of the business, to base their estimates upon mere possibilities.

This difference is a vital one and, in my opinion, a lack of recognition of this distinction has led in some cases to a contempt for the budgeting process.

A knowledge of the real use of a budget and an understanding of its limitations is essential to an appreciation of its possibilities. I believe therefore that there is a decided need for the articles you suggest, provided that the subject is handled from a practical standpoint, and that fine-spun ideas are not substituted for common business sense.

* * *

In the far West the conditions are the same. C. W. Collins, of Morris, Keller and Company, Denver and San Francisco, reports as follows:

In my experience in this territory, the use of the budget is not well developed and in fact is not in general use either scientifically or otherwise.

Most of those using it with whom I have come in contact are constantly developing it and extending it in their business, and some few have developed it scientifically so as to give a dependable forecast of the future. I have in mind a wholesale grocery company that works its budget out to such an extent that the realization very closely approximates the anticipation.

On the other hand, I know of some concerns which religiously make up their annual budgets, but their experiences are far from the results shown by the budget, which fact does not seem to be a matter of any great amount of interest on the part of the management.

I believe that a good series of articles treating the subject of "Budgets" in considerable detail would be of interest and great benefit to readers of *Administration*. The time seems opportune inasmuch as the venture of the federal government in this direction has been in the public eye, and the favorable outcome as published in the

press will undoubtedly attract the interest of every business which has heretofore given little consideration to the subject.

The letter given below is written by Walter Mucklow, of Mucklow and Ford, Jacksonville, Florida, and shows very clearly that the use of the budget by private concerns is scarcely known in the South.

In reply to questions No. 1 and 2: The budget is but slightly used by business houses in this territory. While it is used by the larger municipalities, there are still many of the smaller cities which have not as yet given active recognition to the advantages which it affords.

In reply to question 3: The value, if not the necessity for a budget, has been proved to the public in connection with municipalities and probably a great majority of accountants believe that the principle could, with benefit, be extended to institutions and to mercantile and manufacturing concerns. In this territory, however, the public has not kept pace with the profession and I know of no concern, except the municipalities mentioned, which use a budget.

The business man, in this section at least, does not realize the value of applying to his own business the methods which he admits benefit federal and other governmental work and I believe that he can be influenced in the right direction more quickly and more accurately by an extended series of detailed articles than by any other means.

* * *

The interest evinced by all these accountants and their unanimous approval of the series of articles proposed was convincing and is responsible for the series of articles covering the budget, its preparation, use, and general value which will occupy a prominent place in the columns of *Administration* during the fall and winter of 1922–1923.

BOOK REVIEWS

LABOR AND DEMOCRACY

By William L. Huggins, Presiding Judge of the Kansas Court of Industrial Relations. xii, 213 pp. Macmillan Company

REVIEWED BY JAMES M. LEE*

Governor Allen of Kansas opened *Administration* last month with an interesting discussion of the Kansas Court of Industrial Relations. His mode of treatment was to summon witnesses to the stand to testify about the effects of decisions rendered. This book by the Presiding Judge of the Court admirably supplements the article by Governor Allen.

The charge most commonly brought against judges is that they are out of sympathy with the working classes. Even when they try to be impartial in their decisions they are said to be influenced by social relations, club memberships, church affiliations, etc. In this connection it may be said that Judge Huggins began life as a common laborer and he ought, therefore, to be unbiased in his appraisal of the rights of capital, those of labor, and those of the party of the third part—as Governor Allen calls the public. His contribution to the discussion of an industrial court is his suggestion about legal principles upon which legislation for the settlement of industrial disputes may be based.

The book is divided into four parts. Part I takes up such subjects as "Conservation of Industrial Resources," "Class Rule," "Equal Opportunity," "Socialism No Remedy," "The Need of Legislation," "The Psychology of the Present Labor Leadership," and "The Ten Industrial Commandments."

These ten commandments are given as follows:

To The Worker

1. Thou shalt not place the union card above our country's flag.
2. Thou shalt not deny to any man, at any time, in any place, the right to work as a free man and to receive wages as such.
3. Thou shalt not demand a good day's wage in return for a bad day's service.

To The Employer

4. Thou shalt pay a fair wage to each and every one of thy workers.
5. Thou shalt furnish a safe and healthful place in which, and safe appliances with which, thy employees may work.
6. Thou shalt operate thy business as continuously as its nature will permit, to the end that labor shall be regularly employed and that the public may not suffer for the living necessities furnished through the medium of thy activities.
7. Thou shalt not demand extortionate profits. Thou shalt be content with a fair return upon thy investment used and usefully used in thy business.

To Every Citizen

8. Thou shalt willingly pay a fair price for all commodities required by thee from Labor and Capital, to the end that Labor shall have a just reward and Capital a fair return.
9. Thou shalt pay thy taxes cheerfully and honestly, to the end that the obligations of the state to all its people may be promptly and properly fulfilled, liberty and justice safeguarded, and the general welfare assured.
10. Thou shalt honor and love thy government, for it is the people's government, the best ever devised by man, and there is none other like it in all the world.

Part II reviews fundamentals of the Kansas Industrial Court. As these were taken up last month in *Administration* by Governor Allen, no mention of them needs to be made in this review.

Part III—in some respects the most interesting—gives the reader interesting incidents about the court. Among the first cases for adjudication was that of the

* Editorial Staff of *Administration*.

mine workers. Alexander Howat, President of the United Mine Workers, was subpoenaed but refused to obey the order. He was cited for contempt and tried before District Judge Andrew J. Curran who sentenced him to confinement in the county jail until willing to testify in the Court of Industrial Relations. At one time, the court in which Howat was tried was filled with county officers of the Socialist faith. Judge Huggins points out that one of the most peculiar situations developed when Curran ran for judge was that the leading Catholic Priest of the district and the pastor of the First Methodist Episcopal Church of Pittsburg campaigned the county together in an effort to elect Curran. Of Curran, Judge Huggins says:

> Of all the men connected from first to last with the enactment of the Kansas Industrial Law or with its administration since its enactment, first honor should be given to Andrew J. Curran, who has lived his life among these people, who must continue to live among them, who was unmoved by personal fear or political policy. He did his duty simply under oath of office without reference to any other consideration. If there had been sitting upon that district bench in Crawford County, Kansas, on that day, a petty politician, a weak man, a man of any other type, the first year of the administration of the Kansas Industrial Law might have been a very different story.

Part IV, technically called the Appendix, fills nearly a half of the book. In it will be found the Industrial Law itself and other matters of interest to those who are making a special study of the principles of industrial injustice. The decision in the Topeka Edison case is given in full. This case is of interest to executives because Judge Huggins defines in his decision a fair wage. The Millers' case should not be overlooked because it is really a controversy between economic law and statutory law. In the chapter in Part IV dealing with the decision in the *Workers* vs. *Wolff Packing Company*, the reader will find a discussion of the irreducible minimum in wage.

Orders of the court following this show that the miners' district convention had amended its constitution so as to impose a fine of $50 on any miner, and $5,000 on any local union operator who should appeal to the Court of Industrial Relations.

The concluding chapter is entitled "The Court of the Penniless Man." The space which the reviewer usually gives to critical comment about the book may be sacrificed in this instance for the quotation which follows:

> This court is known as the "Court of Industrial Relations." It may properly be called the "Court of the Penniless Man." The legislature of the state of Kansas, out of deference to labor, created a tribunal in which justice is administered without money and without price. The poorest man in Kansas, if he is engaged in any of the essential industries named in the law, may at any time come into this court and make his complaint known. The state provides him with a lawyer who will prepare his case for him without charge. It provides him with expert accountants and engineers, and with trained examiners, who will investigate his case and prepare his evidence for him, free of charge. He is not required to put up a bond for costs, not to pay his own witnesses. He is supplied by the state with everything he needs in the way of expert advice and assistance. The law enjoins upon the Court of Industrial Relations that it shall do all things necessary to develop the facts in the case.
>
> The law does more than this for the laboring man. It provides that, if after the Court of Industrial Relations has rendered its decision and made its order, the laborer is dissatisfied, he may take the matter before the Supreme Court of the state of Kansas, the highest court in the state and as good a court as there is in the United States of America. In case he desires to take his grievance before the Supreme Court, the evidence which the state helped him prepare and introduce in the Court of Industrial Relations is transcribed by an expert reporter for him, paid by the state, and so he gets with his grievance, and with all his evidence, to the Supreme Court of the state of Kansas still without a penny's cost. The legislature has commanded this court to investigate his living and working conditions, and so even the wife and children of the laboring man, if they desire to do so, can come into this court with the same complaint and receive the same treatment.

At this time when the public press is filled with so many accounts of industrial disputes, "Labor and Democracy," shows a ray of sunshine breaking through the clouds and may indicate the dawn of industrial peace.

THE PSYCHOLOGY OF SELLING LIFE INSURANCE

By Dr. Edward K. Strong. xii, 489 pp. Harper and Brothers

Reviewed by Henry C. Link*

The more immature a science is the more premature we are likely to be in attempting to apply it. The initial stage in almost every science has been marked by the belief that it could explain almost everything. Thus we have the climatic interpretation of civilization in the field of physical geography; the economic interpretation of history in economics; the Freudian interpretation of life in psychiatry; the "glands regulating personality" in a new department of physiology; and even at this late date, the "time-binding" ability of man emanating from the staid realm of mathematics. So with the science of physics, there was a time when many people thought it could be used to explain all the phenomena of the universe. Today physics is one science among many, a great science to be sure, but nevertheless a science with distinct limitations. We do not find the newspapers and magazines full of "the physics of this" and the "physics of that." We do not see among industrial literature frequent mention of the "physics of production" or the "physics of machinery." And when a pitched baseball in its trajectory meets the head of a batter, people do not say: The ball hit him in the head at the *physical moment*.

What is not true about physics is distinctly true about psychology. We are quite likely to read on the sport page of a newspaper an article on "The Psychology of Training for a Prizefight," or in any magazine an essay on "The Psychology of Labor." Everything seems to have its psychological explanation and everybody seems to be "psychologically speaking." Why? Simply because psychology is in its early and undeveloped stage, which permits both psychologists and laymen to make claims and applications which will be considered absurd when it becomes a mature science. To be sure, there will always be a common-sense psychology, just as there is a common-sense physics today. There have been common-sense psychologists from the beginning of humanity. Such men as Christ, Socrates, Cicero, etc., understood human nature probably as well as we understand it today; but they needed no psychological terms in which to describe their knowledge any more than the common-sense physicist needs the scientific terms of physics to describe why he slipped on a banana peel or why his car skidded into another car. Similarly, the psychological terminology—and it consists mostly of the promiscuous use of the word psychology—in most cases adds nothing to the explanation of facts which could not be given just as well in ordinary common-sense language. The time will come when psychologists and laymen will no more think of saying "the psychological moment" instead of "the appropriate moment" than they do today of saying "the physiological moment" when a man jumps up from a tack which he has accidently sat upon.

The Psychology of Selling Life Insurance is a case in point. This book employs a certain number of psychological terms, but their use obscures rather than illuminates the lessons it seeks to inculcate. And, unfortunately, it selects that part of psychology about which even psychologists admit there is the greatest doubt. The book is based, like so many others (e.g., "Instincts in Industry," "The Psychology of Advertising," "Influencing Men in Business," etc.) on types of appeal, human motives—in short the instincts and impulses of human nature. Unquestionably, these forces exist, but psychology has added little that is new to our ability to use them. (We should except from this statement, the art of Psychiatry, which many psychologists seem to regard as an illegitimate offspring

* Author of "Employment Psychology."

of psychology, and which does not enter into Dr. Strong's discussion.) Cicero in his day, could sway the Roman mob at will, though he had never seen a book on mob psychology. Today, when psychology has subjected human motives to the most minute analysis, there are probably not two psychologists in the world who agree on a classification of instincts, impulses, or emotions. Some reduce all to two, some find as many as 15 or 25. As William James, whose word on this subject is probably more trusted than that of any other man, long ago said: "It is possible to make almost any classification of instincts on this basis, so long as it answers the writer's purpose." [1]

When Dr. Strong begins to base his insurance talks upon such traits as "submission," "approval," "gregariousness," "acquisitiveness," "sex," "love of wife and family," etc., he is proceeding after a sound fashion, probably, but certainly he is contributing little from the field of psychology, simply because psychology in this field has next to nothing to contribute. If I were training salesmen in a knowledge of human motives, I should rather give them the Bible as a text; for whatever our religious beliefs, the Bible presents the finest and most complete account of human motives and behavior ever written, both in respect to man's strength and his weakness. Whatever contribution Dr. Strong's book makes to the art of selling life insurance, it is certainly not in the field of psychology, even though its terminology may be drawn from textbooks on psychology. Judged from a common-sense point of view, it is packed with information and suggestions which ought to be exceedingly profitable to the insurance salesman. And the style throughout is such as to make it one of the most readable books on business psychology, or business in general which has appeared in a long time.

THE GANTT CHART: A WORKING TOOL OF MANAGEMENT

By Wallace Clark, Member, American Society of Mechanical Engineers; Taylor Society. xii, 157 pp. The Ronald Press Company, New York

Reviewed by Joseph E. Pogue *

This is a book of the first importance. "If management is to direct satisfactorily the operation of our industries under conditions of ever-increasing difficulty, its decisions and its actions must be based not only on carefully proved facts but also on a full appreciation of the importance of the momentum of those facts. The Gantt chart because of its presentation of facts in their relation to time, is the most notable contribution to the art of management made in this generation."

The Gantt chart differs from all other charts in this particular: Work planned and work done are shown in the same space in their relation to each other and in their relation to time. The preparation of a Gantt chart necessitates the making of a plan. The making of a plan requires knowledge of the past, and the application of this knowledge to the future. The Gantt chart records not only the plan, but the deviations of performance from the plan. In consequence, the Gantt chart co-ordinates the functions of planning and execution and assists in placing the work of management upon a quantitative basis.

The Gantt chart was devised by the late H. L. Gantt and, although in use for only some five years, has enjoyed a wide application in industry. Mr. Clark, as a professional associate of Mr. Gantt, is well fitted to elucidate the technique of the Gantt chart and he has done his job well. The work is clearly and logically written; ample illustrations are included; and with its aid, no difficulty will be met in

[1] "Principles of Psychology" II, p. 382.

* Consulting Engineer, New York.

applying the Gantt chart to specific problems.

At the beginning of the book, the principle of the Gantt chart is set forth, with special emphasis upon the *time element*, the *rate* at which work is done, the relation of performance to *plan*, and the "momentum of industry." The technique of drawing the charts is then taken up and full directions are given for enabling anyone without drafting experience to get satisfactory results. The application of the chart to various classes of work is next outlined and separate chapters are devoted to the machine record chart, the man record chart, the layout chart, the load chart, and the progress chart. The application of the chart to the problems of the American Merchant Marine during the war forms the subject matter of an additional chapter; and the work closes with two contributed appendices: "How a Manager Uses Gantt Charts,' by Frank W. Trabold; and "The Measurement of Human Work," by Walter N. Polakov.

This is a book that no management engineer, no statistician, no economist, and no progressive executive can afford to be without. Mr. Clark has rendered an invaluable service in making an important body of management technique so easily available.

THE FOUNDERS OF POLITICAL ECONOMY

By Jan St. Lewinski, Professor of Political Economy in the University of Lubin, Poland. viii, 173 pp. P. S. King and Company Ltd., London, England

Reviewed by Hugh Mercer Blain *

In spite of the brevity of this book—possibly because of it—executives will find it a remarkable storehouse of facts relating to the foundation stones of political economy. It is a book which will make executives think.

Its author's purpose has been to find among the doctrines advanced during recent centuries, such theories as can still help in the understanding of economic laws. He has tried to separate the chaff from the corn, so he tells us in his preface, and to put in evidence theories on which modern economic science can build. Those of us who have read his "Origin of Property" will welcome for personal perusal "The Founders of Political Economy."

Professor Lewinski first speaks of the origin of economic science and then proceeds to discuss such subjects as economic laws, theories of money, the laws of supply and demand, value and use, and value and exchange, theories of production, theories of distribution, etc.

The two great leaders of economic thought, Adam Smith and David Ricardo, have each a chapter devoted to them in this volume. The author does not hesitate to point out certain deficiencies in Smith's theory of capital, and is equally as frank in his criticism of Ricardo's theory. He includes in his little volume a discussion of two currents in political economy which are now merging into one main stream.

In conclusion Professor Lewinski emphasizes the importance of uniting abstract theory with the observation of concrete phenomena. His book, therefore, will appeal both to the academic teacher of economics and to the economic expert of our financial and industrial institutions. The reader will especially like the book because of its admirable clearness and its sound economic common sense.

* General Manager, The Associated Rice Millers of America, New Orleans, Louisiana.

PRINCIPLES OF THE NEW ECONOMICS

By Lionel D. Edie, Associate Professor of History and Politics, Division of Current Industrial Problems, Colgate University. xiii, 525 pp. Thomas Y. Crowell Company

Reviewed by Clyde Olin Fisher *

A few years ago the late Carleton Parker, in an address before the American Economic Association, gave emphasis to a phase of economics study which had too long been neglected. Parker's analysis of the instincts which motivate economic activity shows some resemblance to the Veblenian theories worked out in the "Instincts of Workmanship" and other books by the same author. Following the address of Parker, Ordway Tead published his "Instincts of Industry." Professor Edie has written, in this volume, a book which reflects the same general emphasis.

The book falls into three logical divisions: Economic Psychology, Economic Institutions and Functions, and Economic Adaptation. Economists of the traditional schools will find in this treatise much that has formerly been passed over to the psychologist and the sociologist. Economics to Edie, however, is a broader field than it is usually conceived. He defines it as "the science of human nature in its relations to the ordinary business of life" (p. 1). Again he elaborates his concept: "Economics is equally a science of the imponderables of human nature—of the motives, emotions, thoughts, and satisfactions of men engaged in earning and spending an income." (p. 69.) With such a conception of the scope of the science Professor Edie goes much further than do those economists who regard it as the study of the value problem. He gives himself latitude within which he can discuss most problems which have human interest. And one is impressed with the abundance of the matter which the book contains.

Necessarily, when so much material is introduced, some aspects of economics cannot receive thorough treatment. This appears to be the case with the discussion of such phenomena as interest, wages, rent, and profit. The reviewer has a feeling that one might master all the subject matter of this book and still lack comprehension of some of the vital problems in economics. In short, it does not supplant the present standard texts. Rather, it constitutes a valuable supplement thereto. One who has not had a detailed course in economics, as such, will probably get from Professor Edie's book more than he can from the reading of the usual texts. The theory defended evolves from current phenomena with which the reader will be more or less familiar, in most cases.

This is not to say that the author shows himself ignorant of economic theory. Quite to the contrary, as illustrated in his discussion of wages, he displays knowledge of all the more important theories that have been defended by various economists. He reaches what he calls a "pluralistic" theory of wages, holding that there is a partial truth in most of the theories, but only a partial truth. His theory might be termed an eclectic theory of wages.

But it is not the contribution to economic theory, as such, that gives value to Professor Edie's book. Rather it is his point of view. He emphasizes social welfare in all cases. For example, in his discussion of the concentration of wealth, "the extremes of concentration take place in those limited circles occupied by the well to do. Their stack of property mounts to the sky while the pile of the great masses of the wage workers is of pigmy proportions." (p. 184.) He advocates inheritance taxes that will work in the interests of the masses and at the same time will not remove the stimulus to the activity on the part of the workers. (p. 229.)

The author has a good discussion of elasticity in demand. He explains the paradox of an increase in demand as a result of an increase in price, and vice versa. Here the reader will recall Veblen's happy

* Professor of Economics, Wesleyan University, Middletown, Connecticut.

phrase of "vicarious, ostentatious consumption."

Edie shows clearly the breakdown of *laissez-faire* economics of the classical school. In fact, he appears to go further in his advocacy of social control than do most of the so-called economic heretics of the present day. His thinking leads him to defend interferences in fields that to many are personal matters and, as such, sacred: "The right to spend one's income as one pleases is no longer an unlimited right, but is amenable to institutional control and guidance."

It is not a severe condemnation in a book of this scope to say that it contains some inaccuracies. Professor Edie speaks of the New York Stock Exchange as having not more than one thousand members, (p. 390) whereas, in fact, the membership has been limited to eleven hundred since the year 1881.

The bibliographical references at the end of each chapter are good and cover a wide range. This part of the work could have been improved, however, had the author arranged the lists alphabetically. His failure to do this probably accounts for the fact that he mentions Van Hise's "Concentration and Control" twice in the same list. (pp. 518, 520.)

In spite of the inevitable shortcomings in such a book it is well done. This book could be read with profit by the man who is not trained in economic theory and who wishes to acquaint himself with the vital phenomena in the economic world. It also furnishes good reading matter for the student who wishes to connect his theory with the operations of the world of affairs.

CIRCUITS OF VICTORY

By A. Lincoln Lavine. Formerly Captain Air Service U. S. A. xxiv, 634 pages. Doubleday, Page and Company

Reviewed by John Mantle Clapp*

This stirring account of the United States Signal Service in the war, by a former member of the American Telephone and Telegraph organization, is a notable example of an "inside book." It was written primarily for the Bell companies and their employees, from whom the war-time Signal Service was chiefly built up. The whole story, from the first war preparations on the part of the government officials and company executives to the disbanding of the force, "deloused, demobilized, delighted," is as fascinating as to most of us it is unknown. From the point of view of the companies:

> It is a history of human beings: an American family of two hundred thousand men and women bound together by kindred ties of service; converted suddenly from peaceful citizens to warriors equipped with deadly technique; pouring their combined energies into a thousand different channels of war; touching our military effort at every conceivable angle. They compressed a vast continent, a hundred-million-souled nation, into a single community. They placed at the lips of the Chief Executive a trumpet through which he might call, on the instant, to the remotest citizen in the land. They gave to the voice of the Secretary of the Navy a medium for instant personal summons to his far-flung naval stations scattered over thousands of miles of coast line, and to his warships grimly ploughing the deep. They bound to a common direction and common purpose, with myriad threads of instant intercourse, the thousands of shops, mills, forges, and factories fashioning the sinews of war. They built, almost overnight, at places that yesterday were desert wastes, complete telephone cities for the huge cantonments erected to house the newly created hosts of the National Army. They furiously multiplied and redoubled their efforts as they thinned their ranks by a constant outpouring of technically trained personnel into the Signal Corps, for administrative and front line duty, into the Navy, for special wire, radio and anti-submarine service, into a dozen other branches of military and naval activity. They helped to transplant to French soil a complete, American system of

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electrical communication, with modern devices of which Europe had scarcely dreamed. They advanced, under shell and machine-gun fire, the swiftly moving strands of speech that linked the onrushing infantry to its base of command and supply. They bent the creative thought of their corps of a thousand highly trained inventors, to new and potent military devices—widening the range of wireless speech in the air, aiding the Navy to track the submarine, designing equipment for locating, by uncanny electrical creations, the direction of enemy gunfire, of hostile aircraft manœuvring in the dark.

A record like that is too splendid a company asset to be allowed to fade from organization memory. This book, setting it down in graphic terms, is a remarkable specimen of far-sighted intra-organization publicity.

But more than that, this book is significant to readers of *Administration* as a fresh justification of modern management. The war emergency revealed the possibilities of the spirit of initiative and energy which we like to call American, when disciplined and guided by the grouped intelligence developed in our great industrial organizations. This book is a motion-picture of such an organization speeded to its limit. The episodes which crowd its 600 pages steadily deepen your realization that the capacity of these men—chiefs and subordinates alike—for co-ordinated, constructive effort was directly the product of the training received in their civil life employment.

Take, for example, this account of the work of a telephone crew in connection with the plans made in February, 1917, for the enlargement of the Coast Cunard telephone system on the Atlantic, Gulf, and Pacific coasts:

Instructions were received to make a thorough inspection of the U. S. Coast Guard telephone lines from Toms River to Cape May Point, on the New Jersey coast—a distance of 120 miles. "A report is requested," the instructions concluded, "*within 36 hours.*"

It would have been a difficult task to complete within a week—or a month, for that matter; for the existing line was constructed along loose and treacherous beach, over sand dunes, marshes, waterways, bays and inlets, making it necessary to utilize every available means of transportation, including automobiles, railroads, hand-cars, horseback, motor and row boats. A large portion of the line had to be covered on foot, as the greater part of it stretched through uninhabited country, with no accessible roads.

With little time for eating and not much more for sleeping, the inspection gang went over every inch of that line, and within the allotted 36 hours, submitted its report.

The line was found miserably inadequate and unfit. "Build it all over again," was the burden of the report. And so orders came back from the Navy to rebuild the entire line. Back to work went the telephone crews. But this time the work was completed under conditions far worse than those encountered during the inspection. Sleet storms ran icy and excoriating fingers across the faces and hands of the crews, heavy weather added to the burden, lack of shelter made life almost unbearable. Transporting their poles and material on boats and rafts, through heavy ice-fields and storm-tides, frequently drenched by seas and storms, and suffering severe hardships, the men stuck to the task and completed the job on schedule time.

Here is an instance of swift and accurate planning by a trained executive—the drawing up by a telephone chief in May 1917, of a complete scheme for the equipment of the future American telephone service in France:

At this juncture Major James W. Hubbell, commanding the 1st Reserve, or 406th Telegraph Battalion, of the Bell Telephone Company of Pennsylvania, was called to Washington.

"I hadn't the slightest idea what was up," said Hubbell, "but as soon as I had reported at the Chief Signal Office in Washington, I was led into a private office where, on a wall, hung a large map of France, decorated by two rows of coloured pins crossing each other. Colonel Russel was standing there in front of the map in a rapt, thoughtful sort of way, as if contemplating what lay behind those pins.

"He turned around immediately, and I had no sooner introduced myself than he began, 'Hubbell, here is the proposed axis of communication in France. It is to be a line 400 miles in length, with a 265-mile auxiliary axis. Your telephone company, I understand, is accustomed to building just such lines as this one, and that is why you have been called for. I want you to study it, and let me have a list of the tools, apparatus and equipment necessary.'"

Saying which, Russel put on his hat and made his way out to lunch.

"And by the way," Russel added, as he paused on his way out—there was just the suspicion of a twinkle in his eye—"if you can let me have

that list by the time I have returned from lunch, so much the better."

Hubbell took the hint. For all of two nights and a day, the Engineering Department of the Bell Telephone Company of Pennsylvania worked away at the details in the preparation of a general requisition for all the materials and tools that would be required in conjunction with the projected network of communication insofar as it could possibly be estimated.

At the end of the second day, Hubbell presented the proposed requisition at Washington.

It was immediately approved.

"And," said General Russel, nearly three years later, "in the light of subsequent experience, it may be said that the requisition would not need a ten per cent revision."

Here is a picture of engineering resourcefulness in emergencies. Early in the war a Research and Inspection Division was set up in France under charge of Western Electric engineers:

Another day a call for help came from the Ordnance Department. They were having difficulty with the illumination of cross-lines on artillery pieces. The problem was how to furnish sufficient light without attracting the enemy's attention. Shreeve went to the front himself, equipped with a pair of scissors and a tomato can, and worked the thing out in a dugout. In a week he had designed a lighting system which in every way met the requirements, and placed it on a basis where it was ready to be produced in large quantities under heavy orders. Later, when the First Division went into line at Montdidier, the commander of one of the brigades sent his aide to Shreeve with the request, "Give us all the devices you can in a hurry—within two or three days, if possible." Shreeve loaded a whole carful of them into a Cadillac, and the very next day they were rolled away into action.

Shreeve, incidentally, was always exceedingly modest about these remarkable achievements. "Nothing but a Western Electric job," he once remarked to an assistant, "applied to new conditions. Design—laboratory test—specifications—factory—*rush:* wouldn't you think you were back home with the Western Electric?"

Here is a picture of a rush production job at the Western Electric works out at Hawthorne:

Back in the early days of the war, the Signal Corps put in a call for 50,000 portable switchboards of a new design. They were needed in a hurry.

Under ordinary circumstances, it was a five months' job, but these were no ordinary circumstances.

The manufacturing organization decided that, working at break-neck speed, they could get the work out in six weeks.

It *had* to be that sort of schedule, for—to mention just one difficulty—the tool-room, already crowded, would have to rush out Eleven Thousand Dollars' worth of new tools alone for the job.

Fifty-six tool-makers were assigned to the work. They went at it with a will, determined to meet the Government schedule if it were humanly possible.

Five days later, while they were "breaking their backs to make good," came an appeal from the Signal Corps to try to *better* the date of delivery. The apparatus was needed badly—and quickly.

Hawthorne's answer was to put one hundred and eighty-two tool-makers on the job at once. Sleeping and eating became secondary matters to these tool-makers until the job had been done. One of these worthies claims he slept sixty consecutive hours after the job had gone through.

"And," he remarked, a year later, "I haven't caught up on my sleep yet."

The tools finished, the job went to the manufacturing department, where "they were hungry to grab it," as the superintendent put it.

That order of 50,000 portable switchboards, complete, went to the Government *just three weeks and one day* after the work was begun at Hawthorne.

"We put it all over Joshua," chuckled the superintendent. "We held up Father Time and took a little over four months away from him."

Here, finally, is a picture of the work of the super-linemen of the 406th Telegraph Battalion in the field, in connection with an attack by the 1st Army Corps in the Aisne campaign:

At four in the morning the companies were assembled, trucks loaded with wire so arranged that it could be run off from the reels as the trucks advanced, and the sections equipped and held until further orders. . . . About eleven-thirty all our lines to the 26th Division went out. Two of the men started following the line and about five hundred feet down the hill they tumbled into a shell hole. The shell had fallen right on our line and we were minus about seventy-five feet of twist on each circuit. This was repaired in quick time and the boys just returned to the dugout, when almost all of our circuits to the rear, forming the axis of liaison with the 1st Corps Headquarters, went out.

A gang was immediately started and found the line almost completely broken down by shell fire. This gang did not get back till the following night, as they would no sooner get one break patched up than another shell would come and do the same damage as its predecessor. Toward morning, when it became known that it was our own doughboys who had started the fuss, the tension of our nerves relaxed a little, as the confidence of every American in France was supreme when it came to our boys.

In short, the reader comes to see that the war work of the electric companies and the men they had trained was only a bigger job of the kind they are always doing. The hero of the story is the electric industry itself.

Why have we not more books of this sort? The work of a modern industrial organization is anything but the humdrum routine it is represented to be by those who know it only from hearsay. It is filled with the romance of intense struggle. Its coordinated effort engages the main interest of hundreds or even thousands of active men and women. Why cannot the inside spirit of the railroads, the mills, the great distributing organizations be set forth in plain but authentic terms as in this book?

Such accounts could not be written by mere professional "writers" any more than a sea-tale can be told by a landsman. But there are men within the industry who have the right perspective and could tell the story, if they would set themselves about it. Such books would be deeply interesting to men and women with blood in their veins and would help the hosts of industry through giving them a more conscious realization of the reasons for their interest and pride in their own work.

Incidentally, books of this kind would do much to prepare the young people now proceeding through the schools for intelligent participation in the world of today. They would serve to recruit the armies of industry with the sort of youngster who enters a particular line of work because he understands and likes it.

CHRONICLE AND COMMENT

STATISTICS AS AN AID TO MANAGEMENT

In the September number of *Tide Water Topics*, the house-organ of the Tide Water Oil Company, appears a short article describing some of the forecasting methods employed by that company. Introducing its subject, a comparison is made between the equipment of the caravel in which Columbus crossed the ocean and that of the modern steamship:

It is to be presumed that Columbus had a compass, but beyond that we do not know of anything which would have helped him. . .

The modern steamship, however, is equipped not only with a compass but with a barometer which foretells changes in the weather, with the log which tells how far and how fast the ship has traveled, with the wireless which keeps the ship in constant touch with other ships and the surrounding shores, with submarine signals which enable the ship in darkness and fog to signal other ships, and more recently has been devised a method of an electric submarine cable which the ship as it enters the port follows directly up the harbor and which will, in future, practically eliminate danger of collision or grounding in fog.

The business organization under the old order could get along with the simple compass of accounting because of the fact that conditions at that time developed few economic problems of any magnitude, but the modern business organization must have all the help it can get in order to navigate safely. It imperatively needs the business barometer, the business log, the business wireless, and the business submarine electrical signals which are furnished it through modern statistics.

Old-fashioned statistics dealt with the past. Modern statistics are concerned with the future, with the shaping of the course ahead.

To meet the company requirements in this direction a statistical department has been established and is providing:

Operating and planning facts which the executives are using in assisting them to look to the future and provide intelligently for the growth of the company. . . . Special emphasis is placed upon the business cycle in line with the efforts of all modern organizations to guide their activities in conformance with anticipated changes in both the up and down movements in business.

Among the other activities of the department:

An ingenious method of graphic control for the executives of the sales corporation has also been worked out by the statistical department whereby the progress of sales, down to the smallest territory, can be quickly and accurately gauged, thus giving the management an invaluable tool for guiding the operations of the company. This makes it possible to figure the profit and loss on the entire operations for a year in advance on the basis of certain accomplishments, and it is a simple matter to change the calculations if the basic accomplishments vary from the schedule established.

Various charts are given upon which the Tide Water planning is based.

Highly significant is the closing comment on the work of the company's Statistical Department:

It is the purpose of the department to make itself an indispensable adjunct to the all-important work of planning more effectively than our competitors.

A FINANCIAL PROBLEM

A correspondent — a certified public accountant — writes as follows:

Editor Administration:

As a subscriber to *Administration*, I take the liberty of submitting an accounting problem, with which I am confronted.

A town wishes to erect an addition to its school, the present facilities proving inadequate. It has been decided by the voters to raise the required amount of $50,000 by means of a bond issue (5 per cent).

Part of the voters are in favor of a 10-year serial issue, while the other half favors a straight issue of 25 years redeemable by a sinking fund to accumulate at savings bank rate of, say, 4 per cent. They desire to have presented to them the annual cost to be contributed by taxation per annum for either case. However, they ask to have considered in each tabulation the fact that the money the taxpayers have to contribute in taxes is worth 6 per cent to them.

The point which puzzles me is the request of the taxpayers to have considered in the preparation of the statement the fact that the money they have to contribute is worth 6 per cent. The other parts of the problem are easy and of no special difficulties.

Undoubtedly you have means of securing for me an authorative solution which I should greatly appreciate.

Yours very truly,

....

This problem was submitted to Pierre Zaldari, head of the Bonding Department, American Foreign Banking Corporation. Mr. Zaldari's solution is given below:

Editor Administration:

From the statement of the problem itself it is plain that the town is wise in deciding to raise the required $50,000 by means of a 5 per cent bond issue instead of by taxation. This is because the taxpayers of the community and especially the richer portion of it will pay the bills in any case, and therefore, the fact that the money they will have to contribute in taxes is worth 6 per cent to them is an immaterial factor, especially since the burden will be distributed over a decade or two.

The real question in the problem is how the sum to be borrowed can best be repaid. The *first proposition* is to put out a 10-year serial issue. The table below shows the results of borrowing $50,000 by means of a 10-year 5 per cent serial issue. Only the town, of course, is in a position to know if it can pay the necessary amounts per annum as shown in the table. But is it right to pay off in 10 years a loan, the benefits of which are to be distributed over several decades?

The *second proposition* is the sale of "a straight issue of 25 years redeemable by a sinking fund to accumulate at savings bank rate of, say, 4 per cent." Most of the loans issued in this country have been so-called "straight" bonds, all of which mature at the same time, with a more or less adequate sinking fund provision, but the abuse of the sinking fund principle has

Ten-Year Serial Issue of $50,000 at 5 Per Cent Per Annum

Years	Principal	Interest Semiannually	Serial Payments	Total Annual Payments*	Balance
0	$50,000	......	.....	.....	......
½	......	$1,250	.....	.....	......
1	......	1,250	$5,000	$7,500	$45,000
1½	45,000	1,125	.....	.....	......
2	......	1,125	5,000	7,250	40,000
2½	40,000	1,000	.....	.....	......
3	......	1,000	5,000	7,000	35,000
3½	35,000	875	.....	.....	......
4	......	875	5,000	6,750	30,000
4½	30,000	750	.....	.....	......
5	......	750	5,000	6,500	25,000
5½	25,000	625	.....	.....	......
6	......	(25	5,000	6,250	20,000
6½	20,000	500	.....	.....	......
7	......	500	5,000	6,000	15,000
7½	15,000	375	.....	.....	......
8	......	375	5,000	5,750	10,000
8½	10,000	250	.....	.....	......
9	......	250	5,000	5,500	5,000
9½	5,000	125	.....	.....	......
10	......	125	5,000	5,250	0

* This column shows the annual cost of the loan, not considering expenses which will be raised by taxation.

been very notorious of recent years and has led to the introduction of the so-called serial bond system. In this second proposition the taxpayers collectively are borrowing $50,000 at 5 per cent and the money which they will have to contribute in taxes is worth 6 per cent to them. To accumulate a sinking fund only at savings bank rate of 4 per cent is a very flagrant abuse of the sinking fund principle. The table below shows the total annual payment that would have to be made under the sinking fund plan.

ments by making adequate provision for an annual amortization quota so arranged that at the expiration of the life of the loan the entire debt is virtually extinguished. This is the plan under which farmers pay their loans to the federal land banks through their Farm Loan Association.

As the lower table shows, the annual cost of loan, not allowing for expenses, is $3,547.62 or $111.53 less than under the sinking fund plan. This amortization method of repayment besides being the most accurate and honest — it would not

$50,000 Amortizable Within 25 Years Interest Payable Semiannually and Annual Amortizement

Years	Principal	Interest	Amortizement	Annuity	Balance
....	$50,000.00	......	......	......	......
½	......	$1,250.00	......	......	......
1	......	1,250.00	$1,047.62	$3,547.62	$48,952.38
1½	48,952.38	1,223.81	......	......	......
2	......	1,223.81	1,100	3,547.62	47,852.38
2½	47,852.38	1,196.31	......	......	......
3	......	1,196.31	1,155	3,547.62	......
....	......	......	......	......	......
49½	3,378.68	84.47	......	......	......
50	......	84.47	3,378.68	3,547.62	0

According to the above table, if $579.57 is invested semiannually at 4 per cent per annum and compounded semiannually it will accumulate to $50,000 at the end of 25 years and the annual cost of the loan to the taxpayers, without allowing for expenses, will be $3,659.14.

The most favorable form of bond issue for a small town and especially in the case of an issue for the comparatively small sum of $50,000, is one providing for the retirement of the bonds in regular equal instal-

have been adopted by the United States government for the federal farm loans if it had not been — has the advantage over all other plans in that, *first* the sinking fund is accumulated at the same rate as the interest on the loan itself, and *second* the risk of using a trustee, for it is a risk to be considered, is eliminated.

Yours very truly,

Pierre Zaldari,

Head of Bond Department,

American Foreign Banking Corporation.

$50,000, 25 Years at 5 Per Cent Redeemable by a Sinking Fund to Accumulate at 4 Per Cent Compounded Semiannually

Semiannual Periods	Principal	Semiannual Interest at 5 Per Cent Per Annum	Semiannual Sinking Fund at 4 Per Cent Per Annum	Total Payment Per Annum
50	$50,000	$1,250	$579.57	......
..	......	1,250	579.57	$3,659.14

DETERMINATION OF WORKING CAPITAL

A correspondent writes for information as follows:

Editor Administration:

From time to time, we are confronted with finding the best means and most reliable bases for analyzing and criticizing balance sheets and financial operating reports and I am wondering if you have any data showing what particular factors should be analyzed and the relationship that these factors bear to other items on the balance sheet or financial reports — such as receivables to sales, inventories to sales, current liabilities to net worth, etc.

Also can you give me some formula for figuring out the working capital required for a business which expected to do, say, $7,000,000 business on sales billed during the year, had a $2,000,000 inventory, handled their receivables on a 2 per cent — 10 days net — 30 day basis, discounted their vendors invoices and expected to make a net profit, prior to taxes or dividends of, let us say, 15 per cent. What weight or relative importance should be given to each and all of these fundamentals?

Any information in regard to either of these matters if sent to *Administration* will be forwarded to our correspondent and if of general interest will also be published in Chronicle and Comment.

A QUESTION OF COST ACCOUNTING PRACTICE

The following letter relating to Mr. Lazarus' article "Cost Accounting and Cost Accountants" —in the August number of *Administration* is published with the consent of the parties concerned. Mr. Greenwood's memorandum "Deferred Credits to Future In-Operations" referred to in the letter appears elsewhere in Chronicle and Comment.

Dear Mr. Greenwood:

Upon returning from my vacation I received your letter of August 7, desiring a "hand to hand discussion" on the following sentence contained in the article on "Cost Accounting and Cost Accountants" in the August number of *Administration*, which is a skilfully edited reproduction of a talk before the Rochester Chamber of Commerce:

> By all means hold on to the general truth that current production shall bear current costs, but give it the breadth, elasticity, and inclusiveness that modern business requires.

You state you "have become quite touchy on the subject of making current production bear current expenses (sometimes erroneously referred to as current costs) because in about eleven cases out of ten the only connection between the expense incurred and the material produced is, that in both instances the hands of the clock happened to be in the same place on the dial."

The term, "Current Costs," was used to avoid the confusion arising between expenditures and expenses, which elemental distinction we trust you have not overlooked. There is, of course, no other connection between current production and current expenditures other than the one, that "the hands of the clock happened to be in the same place on the dial," and you can hardly expect us to be defending or abetting the position that current production should bear current expenditures. A current expenditure may be merely an exchange of assets, such as the purchase of a building. Industry in the past, and, in some notable instances today, has suffered because assets were charged off in whole or great part immediately upon purchase, or not at all until scrapped, or because bad debts were not provided for until actually realized, all of which comes through an orthodox respect for the time relation between production and expenditure.

And because so much mischief has been incurred through the capricious relationship of production and expenditures we must maintain our respect for the principle which says that current production shall bear current expenses — an expense being defined as a consumption, latent or manifest, of an asset. That is a step towards honesty both for the stockholder and the proprietor,

as well as for the general public. That means that executives' salaries will be charged currently during the year and not be dependent upon the exigencies of net profits. That means that depreciation will be charged as a regular incident of operation and not as a catch-all at the end of the year. That means that bad debts will be regularly provided for so that an enterprise may not be overwhelmed by a concurrence of business catastrophes.

A business man, for whose judgment we ordinarily have great respect, stated it was his practice to charge off for depreciation such an amount each year equivalent to the difference between the book value of his assets and what might be realized upon a forced sale. That may be conservatism, but it is not good cost accounting because it is making current production bear more than current consumption of the assets.

We have not seen the memorandum you have prepared on deferred credits to future in-operations — which you hope some day to publish in *Administration*—but what you probably have in mind is the fact stressed in our pamphlet on Overhead, that when production becomes scant it is not possible to absorb into costs all the expenses that have currently accrued. The attempt to do so gives results that are fictitious and misleading and that hamper business if prices are made on the basis of the cost figures. Your quarrel, however, is not with the principle that current production shall bear current expenses, for there has now entered the element of unit costs and your quarrel is with the divisor, the actual production, rather than what may be termed the normal or standard production, and so, in effect, what is done is to ignore the actual divisor and to substitute what, over a period, is a normal or standard divisor, and in this way we secure unit cost figures that are still an index of efficiency and can be used as a basis for making prices. However, in so doing we do not sacrifice actual or current costs; we merely supplement such current costs with standard costs. And this is what we had in mind when we stated "the general truth that current production shall bear current costs," or, as you prefer it, current expenses "shall be given the breadth, elasticity, and inclusiveness that modern business requires." With this you will hardly quarrel.

And not apropos to your letter, but in explanation of the general position of this Department on cost matters, may we say that there are radicals in cost accounting as in politics. The radical is defined as one having an extreme disregard of the experience and wisdom of the past and desiring to proceed anew, not upon old foundations but upon a clean slate. There are writers on cost accounting who, perceiving certain limitations in present cost accounting methods, desire that these be scrapped and that business embark on principles which seem attractive but which are untried. Job cost accounting is wearisome and expensive and the results come late, and process cost accounting is no considerable improvement thereupon, and yet, in nine cases out of ten, these are the stages cost accounting must pass through before standard cost accounting will have the elemental data requisite to its successful operation. Merely because standard cost accounting is theoretically more attractive than job or process costs is not conclusive of a successful application. There must first be the proper foundation.

Again, few of us have been callous to the appeal of absorbing expenses on an incidence of production. Yet, in certain lines and in certain phases of manufacture, and in certain subdivisions of expense, grave difficulties arise in so doing, and, while favoring the gradual extension of the use of production rather than the time element (See our pamphlet on Depreciation), this Department is not prepared to throw overboard the long honored connection between an expense and the time factor in which relationship all financial results must still be expressed.

Summing up the position of the Department on cost matters, may we say that it is: "Prove all things, hold fast that which is good." And, furthermore, we earnestly believe that the foundation for all cost knowledge is a firm grasp of the elementary principles of debit and credit.

Arthur Lazarus,
Chief, Cost Accounting Bureau,
Fabricated Production Department,
Chamber of Commerce of the United States of America

THE COLLEGE PROFESSOR VERSUS THE PRACTICAL MAN

In *The New York Times* for September 7, appears the following interesting comment:

It is curious, and perhaps just a little amusing, that when the Interborough was obliged to get its motive power from an unfamiliar fuel—Welsh coal, to wit—its own engineers were so unsuccessful in its use that the company had to ask the Transit Commission's permission to reduce the number of trains.

The element of the amusing came in a little later when an appeal for aid and instruction was sent, not to other "practical" men, but to a university professor, a person of the class rather frequently referred to as "mere theorists," as "schoolmasters," and credited with no ability for dealing with the justly celebrated "realities of life and business."

In this case, the theorist was Professor Charles E. Lucke of Columbia. He went down to the power houses, looked the situation over, and, after studying it a little, proceeded to tell the "practical" men what to do and how to do it. His instructions were followed and then the Welsh coal burned well enough—so well that the rush hour trains that had been cut out were cut in again.

One is reminded by this episode that the book on navigation most widely used and most highly respected the world over was written by a Harvard professor, that another Columbia professor taught the cable folk how to conquer their troubles on the long wires, and that many another scholar—usually an elderly gentleman in whiskers and spectacles, if the cartoonists are to be believed—has been equally efficient in helping the men of practical experience out of their practical difficulties.

DEFERRED CREDITS TO FUTURE IN-OPERATIONS

In the March number of *Administration* appeared an article by G. W. Greenwood, "On What Should Selling Prices Be Based." The suggested basis required the setting up of standard costs and Mr. Greenwood was asked to explain his method of doing this. In response he writes as follows:

Editor Administration:

In setting up standard costs, it is necessary to assume a rate of output, which, of course, must be below the rated capacity of the plant. Otherwise one will be on a par with the man who claimed he often exceeded his average, but never fell below it. Also, such assumed output must be within the possible limits of sale and consumption during the period considered.

Advantages of a steady hypothetical output regardless of the actual output are twofold—not to mention relief from the embarrassing situation when one has operating and other expenses but has no output against which to apply them:

First, it is of advantage when the actual output is abnormally low, as it then forms a sales basis more satisfactory than can be obtained by saddling the entire charges onto a restricted output, resulting in a repudiation of such costs as a basis for selling prices.

Next, it is of even greater advantage at a time when every effort is being put forth to meet a flattering demand, because it tends to counteract mistaken notions as to how low one's costs are. For as Julius Caesar says in his commentaries, "men are more prone to believe what they wish to believe"; and they apply to a maximum output only the current operating and other expenses giving results as deceptively harmful as they are attractive.

Here is a crude illustration of a method of using an assumed output: Suppose that the time-measured expenses—fire insurance, taxes, salaries, etc.—are $12 an hour, and that during a business cycle, sufficiently large to afford a safe basis, the plant has averaged in its operation 60 hours out of every possible one hundred. Thereafter we incorporate in the cost for every hour of operation a charge of $2 an hour, whether the plant is in operation more or less than 6 hours out of every possible 10 during the period; whether the period be a few days, or weeks, or months.

Suppose the cost of the time measured elements increases to $15 an hour. We at once begin to include with each hour's operation a charge of $2.50.

This method of incorporating into costs when running abnormally high a larger amount to cover the time-measured elements than the amount actually incurred or accrued, and of including charges at this same rate when the plant has a small output, charging the balance to the reserve for idleness, is the only logical method.

Until by some economic omniscience we secure a uniform flow of manufactured products, the cost of enforced idleness is as much a part of the cost of production as the cost of sowing seed is a part of the cost of the grain which is reaped. In the case of a seasonal product, it is easily perceived that this is true. Only when the times of depression occur at irregular intervals and from unknown and unrecognized causes does the manufacturer assume that the accompanying cost of idleness or of unproductivity should be borne by Providence. But it is not.

In addition to being logical, the idea is not new. An early application is the following from the book of Genesis:

Pharoah says:

> . . . behold, I stood upon the brink of the river: and, behold, there came up out of the river seven kine, fat-fleshed and well-favored; and they fed in the reed grass: and, behold, seven other kine came up after them, poor and very ill-favored and lean-fleshed, such as I never saw in all the land of Egypt for badness; and the lean and ill-favored kine did eat up the first seven fat kine; and when they had eaten them up, it could not be known that they had eaten them; but they were still ill-favored as at the beginning. . . .

Joseph replies:

> The seven good kine are seven years. . . . And the seven lean and ill-favored kine that came up after them are seven years . . . they shall be seven years of famine . . . let them gather all the food of these good years that come, . . . and the food shall be for a store to the land against the seven years of famine.

In other words, during years of extraordinary productivity there should be created a reserve upon which to draw during lean years. Periods of maximum operation must be made to carry a business over the inevitable periods of depression as the fly-wheel of an engine, with its accumulated energy, carries the engine over the stationary points.

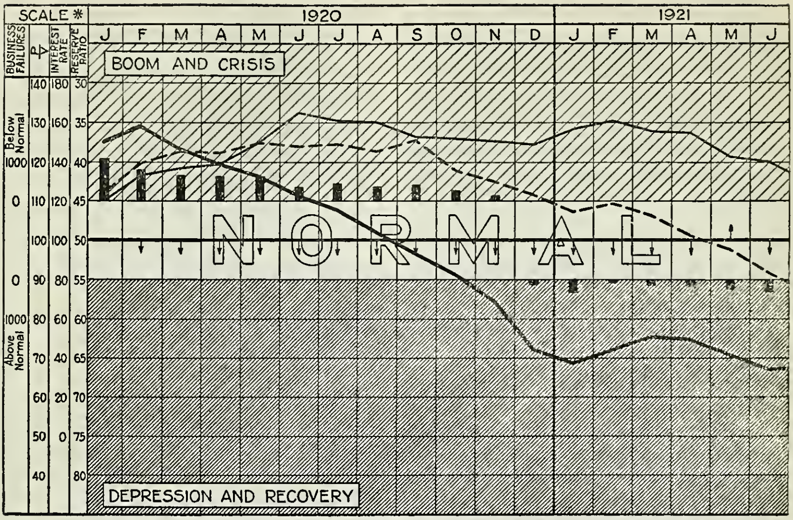
In this presentation reference has been to business cycles, of which we are beginning to hear so much from various sources, instead of to such periods as weeks, months, or years. Why, for instance, should material produced February 28, be penalized for time lost on February 1, yet be excluded from sharing in the benefits of a good, full day's run on March 1? Surely February 28, is more closely allied to March 1, than it is to February 1. The unfairness of this arbitrary separation into months is still more clearly seen when we remember that in addition to naming the sixth month for himself, Augustus Caesar took a day from February and added it to August so that it should contain as many days as did the month named for his Uncle Julius. Little did he realize that his rash act would in coming centuries lower production costs in August and increase them in February!

The use of a long term with many ups and downs aids in overcoming such inconsistencies.

Then there is the financial aspect. Companies do not hesitate to set up a "deferred charge to future operations" in the case of abnormal repair and replacement items. Why not set up a "deferred credit to future in-operations" during times of abnormally good output? Even though profits apparently accumulated during such periods are not distributed as dividends, they appear as additions to surplus or to undivided profits and increase the apparent book value of the stock. Then when the banker sees the book value go from par up to 175, it is somewhat of a shock to see it go down to 125. It would make a far better showing to have it remain throughout in the vicinity of 150. The time may come when such a reserve for idleness will be even more common than a reserve for depreciation is at present.

It has been claimed that such a reserve would not be conducive to economy; that so long as one had this fund against which to charge overhead and other time-measured elements during a period of idleness, he would allow such expenses to continue at a higher rate than if the charge had to be made directly to surplus. But I feel that those who have foresight enough to create such a reserve will also have ability to retain it as far as possible. The remark of a treasurer of a trust company with whom I discussed this topic may well conclude this little chat about deferred credits. He said that checking accounts had dropped to a far greater extent than had saving accounts.

G. W. Greenwood



**Note on Scale:* Failures—Number above or below normal; $\frac{P}{V}$ Line—Index number, 100 equals 1912 rate;

THE BUSINESS TREND—A BAROM

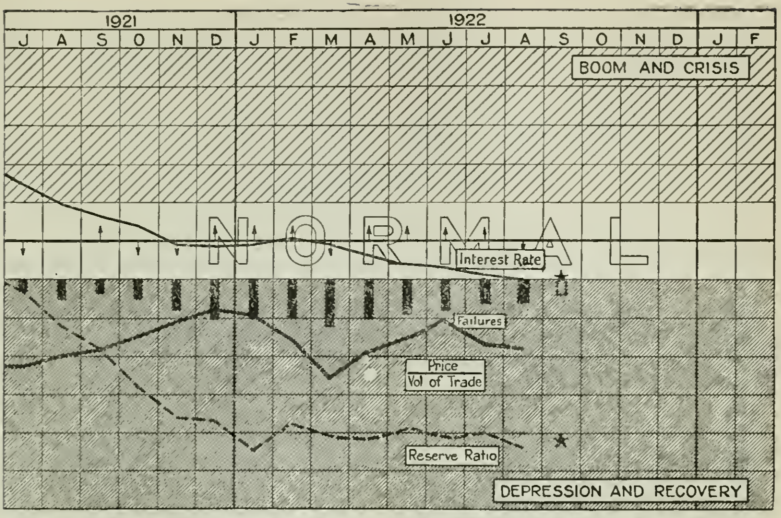
PREPARED BY LEWIS H. HANEY,

EXPLANATION OF BAROMETER.—The trade barometer shown above is so constructed that when business is in the stage either of boom and expansion or is moving downward in the early stages of crisis, the curves and vertical bars are in the upper area. When the general business condition is that of depression or the beginning of recovery, the curves and bars are in the lower area.

The light line shows the course of the interest rate on prime commercial paper, with adjustment for normal seasonal variation. It is based on an index number, 100 equaling 5 per cent. The dotted line shows the federal reserve bank ratio of cash reserves to note and deposit liabilities, *the curve being inverted* so that an increase in the ratio causes a fall in the curve. The heavy line shows the relation between the price level (Bradstreet's index number of wholesale prices) and the physical volume of trade (car-loadings × tons per car). The bars projecting above or below the normal zone indicate the movement of business failures (Dun's). Bars projecting above the "normal" area, show a smaller number of failures than normal; bars projecting below show an excess of failures over normal; the absence of any bar would show that failures are normal. The arrows pointing up or down from the center line of the normal zone show by their direction the course of a special six-commodity price index. The stars indicate the probable trend of the curves during the current month; the dotted bar the probable trend of failures.

THE BUSINESS TREND IN SEPTEMBER

An examination of the business trend in August shows a general downward movement. The sharp setback to industry which began in July, became general in August and carried over into September. A glance shows that all the factors in the barometer, from the price arrows and failure bars down to the reserve-ratio curve moved downward.



Interest Rate—Index number, 100 is based on 5 per cent; Reserve ratio—Actual figure, scale inverted.

ETER OF INDUSTRY AND TRADE

Director, New York University Bureau of Business Research

September has been under the influence of the August relapse, but there are indications of a recovery from that relapse and a resumption of the general upward trend.

It is to be remembered that a demonstration of the fact that we are still in the slow process of recovery from great depression is not discouraging. When one reflects upon the progress that has been made while conditions are still subnormal, one must feel optimistic concerning the future. It means that the real upward swing in trade has hardly begun.

Reading the barometer this month gives the following results:

1. The unsettled price trend of July found expression in a decrease in average wholesale prices during August. The special six-commodity index in that month showed a decline of over three points. The twenty-commodity index of the New York Federal Reserve Bank also showed a decline. The Dun and Bradstreet's indexes showed practically no change, but that is probably due to temporary conditions connected with the strike which affected metals and fuel. Clearly, the price advances of the last few months were checked in August.

It seems probable, however, that no considerable further decline in commodity prices is likely this year after September, and that average prices will at least return to as high a level as the maximum reached in 1922. For the near future, prices are likely to be stabilized at a level considerably above pre-war.

2. The interest-rate curve during August moved down into the area of depression and recovery, which is all but conclusive evidence that business has made relatively little progress in the upward movement. Indications now are that when allowance is made for seasonal variation, the long continued downward movement of interest rates will be checked in September.

The rate on commercial paper is firmer, with a larger volume of business at $4\frac{1}{4}$ per cent than at 4 per cent. The future will depend upon the movement of prices and the demand for capital.

If prices remain firm, or advance, it is not likely that there will be much further decline in the interest-rate curve.

3. The reserve-ratio curve continues to fluctuate at depression levels, but a slight rise is indicated for September. Present indications are that this rise will be continued, but that no such advances will occur during the next month or two as to indicate any check upon speculative activity.

4. Even after allowing for seasonal variation and normal growth, the number of business failures increased in August, as is indicated by the increased length of the bar. This is a good indication that we are still in a period of incomplete recovery from depression. One of the first clear indications of complete recovery will be the disappearance of the failure bars from the depression area of the barometer.

5. The decline of the PV line which began in July was checked in August, indicating that the downward swing will not continue. This decline, however, forecast the unsettlement and setback which marked August and September. It now seems probable that the PV line will resume a gradual upward trend in September. This will chiefly depend upon the price level. It is the failure of prices to reach a stable adjustment which is chiefly indicative of present troubles. Prices are too high in some industries and too low in others. Production has been too rapid in some industries and is inadequate in others. This means further readjustment which will be attended by some loss and delay in general recovery.

The following are among the darker points in the industrial outlook. The improvement in agricultural sections has been checked by the great decline in the prices of the chief crops; and the sales of mail-order houses in August were only about the same as last year. August bank clearings showed a decrease which apparently means a check in merchandizing activity and a continuation of hand-to-mouth buying. Foreign exchange has fallen to lower levels and July foreign trade did not make a good showing. There is a wide divergence in individual price trends and much price unsettlement.

On the other hand, the decrease in commercial loans has been checked. Postal receipts, car loadings, and labor employment have increased. Liabilities in failures have decreased. It is a strong feature in the present situation that there is no excess of speculation and continued caution prevails. Apparently, on the one hand, the drive on wages has been checked, and on the other hand the rapid advance in prices has been halted,—which together indicate smaller but more stable profits with no "inflation" in sight.

The chief need is for continued caution in production. The chief problem still remains a readjustment in production and prices which will bring the various industries into line with the general level.

ADMINISTRATION

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FOREIGN INVESTMENT SECURITIES

BY WALTER E. LAGERQUIST*

I—THE INVESTMENT TRUST

IF the industrial development of the last half century shall continue apace, foreign markets must be developed. This fact, however, is now commonly known and international bankers long before the war were emphasizing the necessity of preparation for this development. Adjustments and preparations as far-reaching as those which must be made in international trade and foreign financial control cannot be made in a fortnight; though one might well have been led to believe this possible from many of the current press publications of 1916 and 1917. Furthermore, frontier industrial developments and the rapid growth resulting from the great migratory movements from Europe are now beginning to settle into the slower growth of the established community. Keener competition, greater efficiency in organization, increasing regulation, and the larger compensation demanded by labor—all a direct result of this change—are forcing greater care and skill in the organization of new industries. And as is also well known when industrial development in this country reaches the point where it must come into extensive competition with foreign production, the problem of continued increase in industrial production will be made even more difficult.

The assumption in many quarters is that certain legislation will give relief from this competition, and the growth of international commercial relationships will in some vague way take care of itself. Considering the present political chaos and political maneuvering which controls the economic status of foreign governments, together with the continuation of the present federal legislation both proposed and being enacted, we may expect a temporary stimulus of two or three years, probably longer, to industry. Measured in terms of the next decade or a quarter of a century—what will the results be? Europe must eventually come back. Important as these questions are to the future financial development and financial control of world markets, they cannot be discussed here. But these conditions must be constantly held in mind by the reader in any study of international finance, particularly at this time when the confusion of cause and effect is so easy.

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In this short series on foreign investment securities three fundamentals will be discussed and illustrated. First, the minimizing of the risk; second, the stability and the importance of the currency system of the country issuing securities; third, the distribution of foreign holdings; the relation of this distribution to our foreign trade and the possibilities and tendencies of our future foreign investments; and fourth, the machinery and the possibilities of foreign financing which exist under the federal reserve system. Each article is written as an entity. Consequently no attempt is made to carry forward any sequential relation in the series. While the phases affecting foreign investments treated are important ones, there are other phases equally important which are not discussed. With this brief statement, let us pass to the consideration of one aspect of the minimization of risk in foreign investments.

II

The assumption is, of course, that the fundamental principles of investments are the same for foreign investment as in any domestic investment. But one aspect making for safety which needs a much larger emphasis in foreign investments than in the domestic investments of the United States is that of diversification. With the great geographical extent of this country together with its great variety of natural resources and its phenomenal growth, extensive diversification has existed within our own borders. But no other nation can offer such safety in diversification in investments of its own securities as can the United States. European countries are too limited in area. Latin American nations either do not have the large range in resources possessed by the United States or stability in political government is lacking, which can also be said of certain of the European and Oriental governments at the present time. Under these conditions the necessity of diversification looms large. The diversification in classes of securities, character of obligor, etc., must follow the same lines as required for domestic investments—but the problem of geographical distribution of foreign investments is distinct from the problem of diversification within the United States.

It is practically impossible even for the trained and experienced private investor to judge intelligently, the differences in currency and banking systems, methods of taxation, business methods, social and political customs, systems of jurisprudence, etc., of the various foreign countries. These differences, together with the unfamiliarity and lack of connections with the sources of information make the long range investigation so essential to safe investment impractical for the private purchaser of securities. Certain of the European nations to overcome these difficulties and obtain the fullest protection to the private investor have provided machinery in the form of "Investment Trusts."

The Investment Trust is based on the fundamental principle of diversification of investments, i.e., on the law of averages. The purpose of these organizations is to reduce the risk of foreign investment by providing adequate machinery for obtaining the information necessary to determine the value of foreign securities and to diminish the risk by the distribution of purchases. While our bankers, familiar with foreign affairs, could fully meet the first requirement for the investor, they cannot secure the second for the average private investor. The large private investor can, of course, to a limited extent secure a certain amount of diversification, but the average in-

vestor cannot. A sharp distinction which is not always taken cognizance of must be made here, however, between the different types of investment trusts. Too frequently they are all indiscriminately put in the same classification while in fact they range from the organizations which purchase only the very highest grade of securities to those which deal entirely in speculative securities. While the various types of investment trusts are discussed, only the former type is recommended for the private investor.

The broader classification of the methods followed by investment trusts are what might be called extensive diversification of purchases and intensive diversification of risks. Extensive diversification is accomplished by distribution on the basis of priorities, the character of the obligor and the geographical allotment. It is the use of the extensive diversification that mainly concerns the private investor. Investment trusts dealing in intensive diversification generally are more speculative in character. They range from the partially speculative to the highly speculative. They include those trusts which have specialized in a narrow geographical distribution, such as certain of the French investment trusts which have specialized in the bonds of Russia and Turkey. The other common form of intensive distribution is in securities of a particular industry as rubber, electrical equipment, telephone, etc. While it is quite true that an investment trust might specialize in one class of bonds, as those of water-power companies, and secure its diversification by geographical distribution, the fullest benefits of diversification are not secured by this form of distribution but by extensive diversification.

Either type of investment trust provides two methods of control to the investor of foreign securities, i.e., evidence of ownership. First by the direct purchase of the trust certificates of the investment trust which entitle him to a pro rata return on his holdings from the net returns of the trust. Second, by the purchase of obligations directly secured by the particular foreign investment, the return to the holder again being on a pro rata basis to the share holdings of the investor. This must not be confused, however, with the obligations which are a straight credit obligation against the investment trust as an organization. In either instance the returns to the holder depend directly upon the earnings to the investment trust.

It is clearly evident from the very character of these trust organizations that careful management is a paramount consideration. While the earnings of a number of the European investment trusts have averaged about 12 per cent for the past 10 years, a number of other organizations of the kind have been forced to liquidate. One of the things which has contributed to the eliminating of losses over a period of years has been the shifting of investments where signs of weaknesses began to develop. No investor need be told that this often requires greater skill than the making of an original investment. Likewise shifts in investments can be made over long periods that will net a larger yield and still maintain safety of principal and income. Such shifts can be made to better advantage by the trust organization because it possesses the facilities and can often command information which the private investor cannot possibly secure. The advantages which an investment trust possesses when difficulties arise are apparent.

Sir George Touche in the Annual Proceedings for 1919 of "The Trustees Corporation," states concerning the policy of handling their investments:

This system of averages is applied mainly in three categories: First, there is the order of priorities, roughly represented by bonds, preference and ordinary stocks. You will observe that this division is set forth in the balance sheet. Then, there are the different classes of industries, so that new conditions which may affect one industry prejudicially are probably counter-balanced by improvements in another; while, in any event, the amount injuriously affected represents only a percentage of the whole. And, thirdly, there is the geographical distribution. All nations, or their legislatures, do foolish things at times, prejudicial to business interests in their country. Happily nations seldom all go mad at the same time, so that what is lost in one country is, perhaps, gained in another.

But we owe our good results to something more than an application of the law of averages, with a carefully distributed ranking as regards priorities, industries, and localities. Another factor has been the policy followed in past years of distributing moderate dividends, and providing liberally for depreciation and contingencies. This policy has been challenged occasionally by a few shareholders, who desired a larger dividend, but it was always approved by the proprietors in general meeting. All these things have contributed to the excellent results we are able to report. But none of them would have sufficed had they not been supplemented by our system of constantly revising the list of investments, and watching from day to day the trend of events likely to affect their values.

III

The English formed the first of these organizations in the early 70's of the last century. Belgium, Germany, and Switzerland followed about 20 years later. The progress of the investment trust in France has been considerably retarded because of the close control of finances maintained by the central government, the necessity of the government's sanction in making foreign loans, the regulations governing the listing of securities and particularly because of the policy of banks in wanting to sell direct to both large and small investors. As the experience of French affairs goes, this policy is not peculiar to this form of institution, but can be found as a guiding principle throughout its government regulations of commerce and finance. The history of the more effective investment trusts of England, however, shows that they have continually expanded the character of their activities.

The purposes and development of these Trusts can probably be best appreciated from a statement of two or three typical prospectuses. The prospectus of the Foreign and Colonial Trust issued in 1868 provided that; "a certain group of Foreign and Colonial Stocks should be selected for purchases with the funds of the Trust—namely Austrian, Argentine, Brazilian, Canadian, Chilian, Danubian, Egyptian, Italian, Nova-Scotian, Peruvian, Portuguese, Russian, Spanish, Turkish, and United States Bonds . . . not more than £100,000 being invested in the stock of any one government." The Submarine Cable Trust issued in 1871 calls attention to the advantage of standardized investment ". . . by distributing the risk over a number of kindred undertakings and making one insure the other." The Sponsors of the Nitrate and General Investment Trust early in 1889, urged that—"the average yields of the holdings of a trust company could be materially raised by including in its holdings the stocks of very speculative enterprises. It was proposed therefore to invest some part of the funds of the trust in the best of the Nitrate Companies which have been introduced into the London Market." This latter development marked the change from the almost entire specialization in government securities of the earlier investment trusts to the later trusts which were organized for invest-

ment in industrials alone. To these belong such organizations as The Eastern International Rubber and Produce Trust Ltd. (organized 1909) with particular interest in rubber, tea, coffee, and other plantations, and The Orient Trust Ltd. (1912) which specializes in tea and rubber. In the Electrical and Industrial Investment Ltd. (1912 London) which was formed to acquire the assets of the City of Birmingham Tramways, a development is taking place similar to that of the so-called "Business Trust" of the United States. This latter development of the trust, however, is not usually for the purposes of investments as such, but rather as in this country for the purposes of simplified control. The factors involved in a consideration of this form of trust is another matter and is not involved in the problem of investment as discussed in this article.

The participation of certain English trusts in underwriting and assisting companies in distress is another form of the utilization of the trust which again must not be confused with the investment trust strictly organized for the purpose of investing in high-grade investment securities. The former organization has utilized the trust because of its simplicity of organization and the ease of control just as such financial organizations are being developed in this country for the purposes of carrying on a general banking investment business. There is little doubt that the trust organization in some modified form for commercial, industrial, financial, etc., operation is going to have rather an extensive development in the next few years in this country. But again this is a form of the trust organization and operation which does not belong to the problem under discussion, nevertheless, the distinct types must be pointed out in order to guard against confusion concerning the character of investment trusts.

The forms of organization of the English trust are quite similar to that of our own corporation. The size of both the English as well as those of the continent is not large, being from £50,000 to £1,000,000. The largest one in Great Britain in 1921 had a capitalization of $19,300,000. An examination of the statements of 100 English investment trusts, selected at random, shows that the capitalization is, on the average, distributed approximately equally between debenture stock, preference stock, and ordinary stock. That the ordinary stock and debenture stock are approximately equal is perhaps explainable by the provision in the Articles of Association in practically all of the trusts which limits the borrowing power of the trust to the issued or paid-up-capital, or, issued capital and reserve fund.

An examination of 50 English investment trusts selected at random as to earnings for the 10-year period 1910–1911 to 1919–1920 showed that:

16	companies averaged	6 to 10 per cent
11	" "	11 to 25 " "
12	" "	5 to 6 " "

Six companies earned less than 5 per cent and could well be placed on the disqualified list. The average earnings for these 50 trusts 1910–1911 to 1919–1920 show a return of 7.90 per cent. The war period 1915–1916 to 1919–1920 showed an apprcciable increase to 8.19 per cent return, due to the shifting of investments. Viewed from the standpoint of the small losses of these trusts, the return for the period is an excellent one. Mr. Thomas W. Lamont in 1920 made the statement that according to the Council of the Corporation of Foreign Bondholders in London from the years 1882 to 1911, the average defalcation each year per $100 was $0.39

	Year of Report	Number of Kinds of Securities
U. S. and So. American Investment Trust	(1921)	310
The Omnuim Investment Company	(1921)	297
Government Stock and Other Investment Companies	(1920)	368
The Investment Trust Corporation	(1917)	315
The Second Edinburgh Trust Company	(1917)	238
The Metropolitan Trust Company	(1917)	220
Edinburgh Investment Trust	(1920)	258

(cents). This compares favorably with the defaults in the United States in gas and electric companies of $0.37, railroads $1.84 and industrials of $2.07.

The distribution of the securities of some typical English investment trusts will give an idea of the possible breadth of their distribution. See table above.

The first trust, for example, on the above list had 22 per cent of its investments in British government securities and had 31 different types of industries, which is fairly representative. The articles of association operating along the lines of extensive diversification usually designate the amount which may be invested in any one security. The more common of these provisions are: Not more than 1/20 of the combined issued share and debenture capital can be invested in any one security except government securities of the United Kingdom. The most common proportions allowed in any one security are 1/20, 1/10, and 1/30. One company allows 1/50 and another 1/3. Companies, on the other hand, which operate on the plan of intensive diversification and a close control to reduce the risk rather than by extensive diversification necessarily must allow a much larger ratio for one class of securities. For example, The Orient Trust (1920) had 83.72 per cent of its investments in rubber and tea shares. Such forms of final control in the distribution of holdings of these trusts will be found in such clauses in the Articles of Association as: ". . . . except with the unanimous approval of the directors."

A more detailed analysis of the character of the distribution of a typical company is illustrated in the summary tables 1 and 2. This particular company was selected because it is representative of those companies which have a more limited investment in government securities.

In addition to the regulation of the amount which can be invested in the securities of one company, there are interesting special regulations such as that of the Debenture Securities Investment Trust which requires that 95 per cent of the investments shall be in the form of bonds or debenture stocks, but only 2½ per cent in one security and not to exceed 20 per cent of the issue of any one country. The London and Provincial Trust provides that not more than ¼ of the issue of capital can be invested in stocks carrying a fluctuating rate of dividend or interest.

The most common provision limiting the borrowing power is that: the total amount of debentures and debenture stock at any one time shall not exceed the amount of the subscribed capital and the amount of the reserve fund. Temporary excess above this is frequently allowed, such excess not to exceed 10 per cent of the subscribed capital. Other organizations, as the

TABLE 1. SUMMARY OF THE DISTRIBUTION OF INVESTMENTS OF THE UNITED STATES AND SOUTH AMERICAN INVESTMENT TRUST, LTD., LONDON.[1]

Distribution in Values—and in Number of Securities (last three 000 omitted)

NAME	GOVERNMENT		MUNICIPAL		RAILROADS		TRAMWAYS AND STREET RAILWAYS		PUBLIC UTILITIES		INDUSTRIAL		FINANCIAL TRUSTS		TOTAL
	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	
Debenture Stocks and Bonds. . . .	£480 400 francs	17	£22	4	£199 $215	40	£44 $25	11	£107 $40	16	£331	56	£29	7	£1,214 $280 400 francs
Preference and Preferred Stock	....	....	....	....	£50 $10	10	£17	5	£18 $44	7	£163	46	£27	8	£277 $54
Common Ordinary and Deferred	....	....	....	....	£135 $50	17	£15	2	£54	6	£78 $20	25	£112	17	£396 $70
Notes	....	....	....	....	£15	2	£10	:	£9	1	£69	10	....	....	£103
Totals	£480 400 francs	17	£22	4	£400 $275	69	£86 $25	20	£189 $84	30	£642 $20	137	£169	32	£1,991 400 francs $404

([1] Investments as per Balance Sheet April 4, 1921 do not tally exactly with the above tables. The discrepancy is due to the fact that stocks in the distribution table are taken at par value while they are set up at cost in the balance sheet. Since the respective valuation of each investment is not available a common basis for distribution was to take all investments at par. This, of course, involves a slight error, but the purpose is to represent a typical example of the application of the method of diversification of risk through extensive diversification.)

Table 2. Classes of Investments Arranged in Order of Amounts (Values)[1]
(*Last three 000 omitted*)

Class	Value	Number of Investments
Industrials	£642 $20	137
Government	£480 400 francs	17
Railroads	£400 $275	69
Public Utilities	£189 $84	30
Financial Trusts	£169	32[1]
Tramways—Street Railways	£86 $25	20
Municipal	£22	4
Total	£1,991 400 francs $404	309

([1] The redistribution of risk of this investment trust is investment in other investment trusts. This practice offers very large possibilities.)

Debenture Securities Investment Trust, allow a borrowing by the management of 30 per cent of capital issued, but a written consent of 90 per cent of the holders must be secured before further borrowings can be made. Rarely do we find such rigid limitations of borrowings as that of one-half the capital issued as in the General Commercial and Investment Trust.

What the future growth in English investment trusts will be, is still problematic as it is too soon after the war to know what shifts in investment practices may take place. The growth in the number of these organizations had almost ceased by 1912 though the war seemed to give a renewed stimulus to the existing trusts. One authority maintains that the original use of the trust was educational and that the English investor had acquired a full appreciation of the problems of foreign investment and the need for the institution has past. Regardless of how great one's knowledge becomes, as seen from the foregoing discussion, certain things are essential in securing diversification which are well supplied by the investment trust.

IV

The investment trusts on the European continent have more largely adopted the specialization method in their application of the principle. The Trust for Metal Securities in Basle, Switzerland, the Trust for Rubber Securities in Antwerp, Belgium, and the Trust for Electrical Enterprises in Berlin, Germany, are examples. The reason for this larger proportion of specialized investment trusts on the continent is the later development of the trust on the continent. As already suggested, the later development of the Trust in England has shown an increasing proportion of this type of investment trust.

Switzerland is the home of a number of investment trusts established by groups of International Bankers. Several of the purely investment trusts originally created for the purchase of investments have extended their operations though they have retained their trust form of organization as the Société Financière Franco-Swisse now affiliated with the Union Financier de Geneve, a banking and financial company.

Contrary to what one would expect, a number of Swiss trusts have been organized for purely speculative purposes. A number of banking concerns, for example, founded the Société Financière Swisse Américaine for the purpose of speculating in American stocks. The company was liquidated in 1898 and

again brought into existence in 1907. Another common practice in Switzerland has been the establishment of subsidiary investment trusts by Swiss banks. Some banks in the past have abused the power of control of these subsidiaries as it has been an easy matter to unload securities on them. This practice has occasionally in the past appeared in other countries but much less so than in Switzerland. These uses of the investment trust, of course, are quite different from the purpose for which it is recommended here.

The French investment trusts, as stated in the early paragraphs of this article have not made marked headway, due principally to the unfortunate political control of financial affairs in France. The specialization method, particularly geographical specialization, has been followed in France. Russia, Austria, Hungary, Italy, Turkey, and the Balkan States have been the states in which government security holdings have been large, but the results have not been particularly gratifying. Political influences can easily be traced in this distribution. Other lines of specialization include those organizations engaged in the flotation of loans. A number of French investment trusts have specialized in coal mines but the most of these have had a brief existence. The organization in 1905 of the Société Financial Franco-Américaine, dissolved June 29, 1916 offers a rather interesting incident of a shortsighted purpose in its articles of organization from a long-time point of view. The organization was formed for the purpose of securing a higher profit by the combination purchase of American and French securities. With the higher rates in France, however, which prevailed over those of the United States after the midsummer of 1914, the principal object of the organization was eliminated. In no sense can the French investment trusts be considered as successful as the English—and for no other reason than a violation of the true fundamentals of the investment trust.

The business of investment trusts in Belgium is chiefly carried on by a great number of banks which are also financing and promoting companies. Some authorities claim that the first investment trust in Europe was the Société Generale de Belgique, founded in 1822, but it is not, strictly speaking, of the modern type of investment trust. Belgian institutions probably more largely than any other country have invested in street railways all over the world. The largest exclusively investment trust is the Banque Belgique de Chemins de Fer, established in 1894, by an international group of bankers. It was organized for the purpose of purchasing, selling, and subscribing to stocks and securities of railroads and street railways. It possessed considerable holdings in American securities. The Belgian Investment Trust reports, outside of the American Utility Holding Companies, are illuminating in the evidence which they reveal concerning large and diversified street railway investments.

The investment trusts of Germany have never occupied a very important place. Very few investment trusts have been organized for the purpose of purchasing and holding foreign securities. The most obvious reason for this is the late industrial development of Germany. This late development, as a consequence, absorbed surplus funds for domestic purposes. As with the United States the capital investments abroad have been made by holding companies in extending their business to foreign fields, or have been made directly by affiliated interests, both banking and corporate, in different

foreign countries. For this reason, as explained in a subsequent article "The Distribution of Foreign Security Holdings," it is often practically impossible to tie up the volume of foreign trade balances, etc., with the amount of investments because of the meager data concerning these holdings.

V

In discussing any particular type of European financial institution, writers are prone to advocate its unmodified adoption in this country. This has been true of the advocates of the investment trust. As far as the soundness of the fundamental principle of the investment trust is concerned, there can be no discussion, but what form it should take in this country and its immediate large adoption is open to question. Let us see what the conditions are which must be met.

The organization of investment trusts has always been possible in the United States under the form of the so-called Common Law Trusts. In a few states, as in Massachusetts, these trusts, frequently and properly called Voluntary Associations are recognized by the statutes. But these organizations have played no large part as strict investment trusts. Financial interests have not undertaken their promotion because of the fear of the public attitude toward foreign investments. And up to a recent date it has been necessary to go abroad to secure funds for our own needs—so that no real excuse can be said to have existed for their organization.

Isolated cases exist of investment trusts which have been utilized in this country in certain forms of syndicates, such as a syndicate in Minneapolis organized in 1894. This organization sells its 10-year, 5½ per cent certificates and invests the proceeds in real estate obligations. A syndicate organized in Kansas City in 1898 operates under similar conditions. These organizations have been purely local in character and consequently are only a modified form of the true investment trust.

The first federal legislation, giving definite recognition to the principle of the investment trusts in the United States is the Edge Act, under which corporations may be organized with much the same powers as the European investment trusts. The primary purpose of this Act was the current financing of foreign trade and the investment trust function is only an incident to the operations of the corporation organized under the Act, though its provisions also provide for the creation of organizations having the full privileges of the English investment trusts. It should also be further noted that the form of organization under the Edge Act is that of a corporation and not of the so-called trust. But no detailed reference to the operation of the Act is essential, as here our interest is in the provisions for the purchase of foreign holdings. The other features of the Act will be more fully covered in a subsequent article. The particular clause of the Act authorizing the purchase of foreign securities is as follows: (with the consent of the federal reserve board)

> . . . . to purchase bonds and stock or other certificates in any other corporation authorized under the Edge Act or under the laws of any foreign country, colony, or dependency, or of any state, dependency, or insular possession of the United States, where such corporation is not engaged in the general business of buying or selling goods, wares, merchandise or commodities in the United States and transacts such business in the United States as in the judgment of the Federal Reserve Board is incidental to its international or foreign business.

The total amount of borrowings or liabilities at any one time cannot exceed ten times the capital stock and surplus, or the purchases of one corporation cannot exceed 10 per cent of the capital stock and surplus, (i.e., of the lending Edge Corporation) except on the shares of bank stocks on which borrowings of 15 per cent may be made. With a few "word changes," as someone has suggested, the organizations which can be created under the Act illustrate a common average procedure of the English Trusts.

A few of the investment trust type of corporations have been created under the Edge Act and have had a measured success—others which were organized after the close of the war have already been dissolved. The temporary success of a few of these is wholly attributable to war conditions. Thus far the Act has not fulfilled the claims of its originators. This must not be construed as a criticism of the Act—the Act is sound in principle—but the claim maintained by the sponsors of the Act in advocating the adoption of the law was that it would bring into existence a large number of Edge Act Corporations. It is another one of the striking examples, of which we have had a number in our federal legislation of the last few years, where an attempt is made to force a situation by artificial legislation. The proposed one-hundred-million-dollar corporation failed to develop because "the bankers feared," as one authority states, "that the public will not take kindly to the investments they will have to offer and that a long and expensive educational campaign will be necessary before success in floating really large volumes of trust debentures based on foreign security holdings can be hoped for."

The writer is of the opinion that this point—the public's inexperience and unwillingness to buy foreign corporate securities—cannot be emphasized too strongly. The education of the investor must necessarily be a slower process than many of those believed who have attempted to create Edge Act corporations. Needless to say that the unwillingness of Continental Europe to submerge political differences for the betterment of economic and financial conditions has but added to the average American investors' distrust of investment in foreign securities. An institution such as an investment trust is naturally of slow growth and cannot be brought into healthy existence by artificial methods.

One of the first developments of the principle of investment trusts must come through existing corporations and their affiliated financial institutions which are directly benefited by foreign trade operation. The other form of capital transfer to foreign countries must be through the organization and maintenance of subsidiary corporations abroad by large American Corporations now in existence and desiring further expansion of their business there. Both of these forms of foreign investments have long been used and are continuing in their development. When these forms of investment have assumed larger proportions than now exist with most corporations, the familiarity developed through these organizations with their foreign holdings will have given the education essential to foreign investments. Such education is a slow process.

VI

Foreign securities, with the exception of a few government securities, are wholly unfamiliar to the investor of this country. Without a wide familiarity with any group of securities we know that a free market for these secu-

rities cannot be developed. Purchasers in large numbers will not purchase in large amounts without a complete knowledge of what they are buying. Both a large number of buyers and sellers are needed before the open market now possessed by our own securities can be realized for foreign securities. These markets cannot be forced into existence by any form of legislation, unless the conditions suggested above prevail. The banker's fear, as previously expressed, that the public would not take kindly to foreign investments has caused them to hesitate to avail themselves of the privileges of the Edge Act. The chief hindrance to the operation of the Act is therefore the non-existence of a large and open market. This the originators failed to emphasize.

This argument does not deny either the principle or the need of the investment trust for the distribution of foreign securities in this country. It merely suggests that it is impossible for the United States to adopt it in the large way advocated by many in the last five years. Whether the European investment trust form is adopted or not, and this is of least importance, the principle will be used in this country in some form or other as investors become familiar with foreign corporations and increase their holdings in them. Of the eventual increase in foreign holdings no one doubts, but of the rapidity of this increase, one can only estimate. When European political affairs reach a more settled basis, one can dare venture making such estimates.

The simplicity and advantages accruing to the holders under the investment trust, at the present time, would seem to greatly favor the general acceptance of this form of organization for investment in foreign securities. It also has the advantage possessed by all so-called "business trusts" of at least a partial exemption from taxation, a factor which has now developed into large importance. The most important feature, advocated by those urging the use of the trust form of organization is that of the possible simplicity, centralization, and control in management. On the other hand, this very centralization of management calls for a very high degree of training in foreign affairs. Consequently if a very large and rapid development of the investment trust should take place we would not have the trained men necessary to manage them. Any general acceptance and development, then, of the investment trusts must have the measured growth of other successful financial institutions based on experience. Before this can exist for investment trust, both investors and managers must be educated as to the particular and peculiar requirements of foreign investments.

THE PROBLEMS OF THE CORPORATION TREASURER

BY GEORGE B. ROBINSON*

I—CAPITAL RISKS IN INDUSTRY

A WORLD which for seven years wasted its capital resources in war, somewhat extravagant living, and more lately in the expensive luxury of unemployment, faces the stern necessity of rehabilitation. New capital must be created and mobilized to replace that which has been destroyed. The entire world suffers from its scarcity. It cannot be replaced easily nor overnight. Taxation has become a bar to accumulation. The throes of deflation were discouraging. The remedies are work and thrift, but it will not avail the nation for individuals to earn and save unless the capital they create shall be allocated intelligently in the public interest.

Allocation of capital is not conscious. There is no such central control of finance as would make it possible. In effect, however, our saved wealth is allocated by the banking and financial machinery we have set up for the purpose, to those opportunities of industrial enterprise which appear to promise the maximum of security or reward.

This machinery, however, is motivated by industrial management, which is the final custodian and trustee of capital. When management and finance fail in any field, government will assert its power to supervise. It has done so in railroad finance to the extent of complete control of capital issues. In public utility finance it has gone quite as far in many states. It is only in industrial finance that capital enjoys comparative freedom from governmental direction. It is in this field that management now faces its greatest responsibility. It may not be too much to say that here is the last line of defense of free capitalistic enterprise in America.

This matter of the trusteeship of capital is particularly the job of the corporation treasurer. It is a much bigger job than it frequently appears to be, provided its duties and opportunities are realized. The routine of bossing the credit man, supervising the auditor, and maintaining friendly relations with banks are inconsequential compared with the broader aspects of the job. Into the hands of the treasurer are delivered the financial destinies of a business, which can be made or broken by his judgment. In many instances he will have associates, even superiors, who are too interested in buying, selling, or manufacturing to give sympathetic ear to his problems, let alone such an understanding of them as would make their counsel valuable.

The treasurer must know credit and credits, banks and bankers, capital and capitalists, without misjudging or misusing any of them. He must know how to obtain the fullest credit his industry deserves, without ever using such credit to the danger point; and when, where, and on what terms to obtain new capital. He must be a student of finance and of the trend of business conditions. He must protect the cash position of his company, that is, the *treasury*, against an improvident or too ambitious

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management on the one hand, and against the eagerness of stockholders for dividends on the other hand. To do these things well he must thoroughly understand and never lose sight of the risks which are only normal in our industrial life.

A favorite remark of an eminent western banker is that every industrial corporation will fail in time. Startling as this assertion appears, it is not susceptible of disproof. A successful record of one hundred years may render improbable but does not preclude failure in the one hundred and first year. Nor is this banker a pessimist in regard to our industrial future; he lends many millions to industrial companies and is considered to be very liberal in his judgment of credits.

The basis of his remark is that there are certain very real risks in industry which must be met by management; that management being human is open to all the human errors; that time forces change both in conditions and in management; and that frequently it takes only a single mistake to ruin a splendid business.

Nor is the statement as startling now as when it was first made many years ago; there has recently been witnessed overabundant evidence that it contains much truth. Corporations which were considered impregnable have suffered tremendous losses, not in so many cases to the point of bankruptcy but to extents which have spelled the loss of startling millions and have necessitated reorganizations of financial structure which so far as stockholders are concerned approach that admission of disaster. It is therefore a particularly favorable time, with this record before us, to examine the risks which can attack industrial capital so viciously.

The sources of risk lie somewhat deeper than any casual examination would suggest. It is superficial, for example, to ascribe as a cause of failure that a business was "caught in the panic," that it was overextended, or that it failed because of "mismanagement" or "inadequate capital." While these terms have clear meaning, they are too general to be of much value to the business man who must study rather the opportunities for mismanagement, and the reasons for capital being inadequate.

II

It may be well to touch first upon the theories of competitive industrialism as they have developed in the United States and now have expression in our laws, particularly in the Sherman Act, and in the protective tariff, for these are very real and important sources of industrial risk. The Sherman Act expressed two things:

1. Our belief that exploitation of the consuming public could only be prevented by insistence upon competition.
2. Our desire to preserve equal business opportunity for the man of small means.

Under this theory for industrial development we have been willing that as producers we should be restricted by law, in order that as consumers we might be protected against exploitation. On the other hand, the protective tariff has for its basis an exactly opposite theory. Under it we permit ourselves to be exploited as consumers, in order that we may be protected as producers. Together these policies present a curious system of subsidy and restriction which leaves business groping in a labyrinth of law when it is not mired in politics. "Less government in business" may some day teach us to scrap both policies to the national advantage.

The Sherman Act, and legislation supplementary to it, expressed indeed our abhorrence and fear of industrial impregnability. Industry must de-

velop in and from small units, as individual ambitions and abilities shall conceive and function. Recently by judicial decision the give and take of business information between competitors has been restricted. Industrial development must accordingly be without comprehensive planning, must be entirely "competitive." When a competitive position has been acquired it must be maintained regardless of how many millions it may be necessary to invest to accomplish it; the extensions of competitors must be met, quite blindly, by more extensions; there can be very little co-operation between producers in any industry for the improvement of that industry, except as the law is circumvented or ignored. It cannot be doubted that these difficulties have caused the unwise investment of untold millions.

Again, in so far as the Sherman Act has preserved the opportunity of the man of small means to engage in business on his own account, it has undoubtedly increased business risks. There were 8700 failures in the United States in 1921 of businesses with capital of less than $5000. These do not include the countless near failures when men merely paid their debts and quit. The average liabilities involved in 19,652 failures were less than $32,000. Possibly through the Sherman Act we are principally preserving an opportunity for men of small means to invest at great hazard the little capital they have.

The difficulty with the tariff has been, of course, that we have had no settled policy. Always an issue between the two parties, each new government gives the subject prompt attention to reverse the policy of its predecessor. High tariff rates amount to public subsidy in many industries. Their withdrawal always causes loss to industries which have capital investments dependent for their value upon such rates. Again, now that we are so preponderantly a creditor nation, a high tariff carries with it a very real risk to our exporting industries, because it may mean the loss of much of their foreign market. It will require several years and perhaps the trial of both high and low tariff policies to find ourselves under these new conditions. In the meantime business must carry a very real risk in this respect. It is not unreasonable to expect an entirely new alignment on this issue, with such industries as want protection from foreign-made goods on the one side, and our exporting industries opposed. Until we thoroughly understand the opportunities and limitations of the creditor nation, and have worked out a definite policy accordingly, industry must take its chances, though it has due warning.

III

Another original source of risk is that feature of the credit cycle which economists call "the changing value of money," and business men call "fluctuation in prices." Dun's price index, which was 119.70 in 1914, rose to 263.33 in 1920 and fell to 159.83 in 1921. Gold apparently has shortcomings as a standard of deferred payments. To realize the great importance of a stable standard, one has only to consider the vast extent to which industry is replete with deferred payments. All contracts to buy, all notes and bonds, all bank deposits, represent liabilities which are to be met by deferred payments. When it is considered that the range of fluctuation in the value of money as expressed by the commodity price level has been as great as 40 per cent in a period as short as fourteen months, the wonder is not that some businesses suffered but that any survived.

Our banking system and its latest development, the federal reserve banks, have been set up to serve as auxiliary agencies to gold, to increase its mobility and usefulness, and to alleviate its shortcomings as a standard of deferred payments. But successful as they have been in other respects, they have not provided a stable money. It is inconceivable that the federal reserve bank could have done so up to this time, launched as it was in the midst of the World War, and to a very large extent forced to finance our own participation in it. It is only now in the reconstruction period that it has an opportunity to develop definite policies upon which business may rely. The power it has over the price level need not be feared as long as its direction lies in able and non-political hands. It is necessary that power must lie somewhere if an industrial organism as great as that of the United States is to function.

IV

Another important source of risk is the magnitude of business compared with capital investment, particularly with that portion of capital investment which is known as net working capital. In some industries the volume of sales in dollars is so great compared with working capital that a relatively slight miscalculation in regard to future sales and prices can cause the loss of a very considerable percentage of that capital. The table below shows the net invested capital (with good-will items and funded debt omitted), the net working capital, and the volume of sales of eight large corporations which have this characteristic, together with the ratios of both classes of capital to total sales. Because an expectancy of sales necessitates not only the carrying of merchandise, but forces commitments for future deliveries of additional merchandise, the ratio between sales and capital may be regarded as a fair measure of this particular risk. It is worthy of note that certain of these companies were hard hit by the deflation of 1921, as is evidenced by their balance sheets at the end of that year.

When a business has working capital of $105,000,000 and expects to do a business of $425,000,000 per annum, to take the average of the figures below, it must not only have merchandise, but it must protect its future business by forward purchases. The merchandise account alone, therefore, is not a full measure of the risk. It is interesting to note, however, that at the end

(In millions of dollars, at the end of the fiscal year, 1920)

	Net Invested Capital	Net Working Capital	Sales (1920)	Ratio Invested Capital to Sales—Per Cent	Ratio Working Capital to Sales—Per Cent
Armour and Company	$231	$182	$900	25.7	20.2
General Motors Company	424	139	567	74.8	24.5
B. F. Goodrich Company	63	64	150	42	42.6
Montgomery Ward and Company	34	25	101	33.6	24.7
Sears Roebuck and Company	100	108	254	39.3	42.5
Swift and Company	231	204	1,100	21	18.5
United Cigar Stores	20	9	80	25	11.2
United States Rubber Company	193	112	256	75.3	43.7

of 1920, the average merchandise account of the above companies was $97,000,000 against an average working capital of $105,000,000.

The havoc caused in the wholesale grocery business by the sugar fiasco of 1920 is an excellent illustration of the risk in the magnitude of business as compared with the capital investment. The average grocer turns his working capital at least five times a year. About 20 per cent of normal volume in this business is in sugar. Assuming working capital of $400,000 and total sales of $2,000,000, sugar sales would normally approximate $400,000. But with sugar at 20 cents, sales of sugar might have reached $1,600,000. If such a business contracted for a three months' supply for $400,000, the decline from 20 cents to 5 cents in the market price of sugar would have meant a loss of $300,000, or 75 per cent of working capital. When it is considered that working capital in this business represents a very high percentage of total invested capital (about 80 per cent) and that many grocers had similar contracts for coffee, canned goods, and other commodities, which were shrinking at the same time, the severe losses taken in this business do not occasion surprise.

The clothing industry furnishes another example of the same point. Like the grocery business, the principal investment in this industry is not in plant or machinery but in "current assets," or "working capital." In 1920 a season's contract for woolens made by a certain clothing manufacturer with a net worth of $7,500,000 was for approximately $20,000,000. Shrinkage of 40 per cent in the value of these woolens would have destroyed the company's entire capital, except as it was able:

1. To pass the loss on to its own customers.
2. To cancel its contracts with the woolen manufacturers.

But in either event the risk was there, in the relation between invested capital and the volume of business, or the contractual obligations which the volume necessitated. It could be passed forward or back, if the manufacturer was alert on the one hand, or foresighted enough to have the privilege of cancellation on the other; however, the loss had to be taken by someone.

V

It was this situation which led to such widespread cancellation, even repudiation of business contracts, in 1920. Greeted by some observers as evidence of decadent business morals, it was rather an assertion of the instinct of self-preservation. When business is forced to give up for a time the expectation of profit, there inevitably follows a mad rush by every business to avoid its share in the deflation loss. If it were not for this fact, which is only a part of the competitive process, there might have taken place such a gradual deflation as would distribute the loss with reasonable equity to all businesses and persons, under which circumstances this country could stand a tremendous dollar loss without much hurt to anyone. But wherever any ground whatever existed for cancellation in 1920, it was a temptation difficult to resist, particularly when a business was itself receiving cancellations with every mail. And it is worthy of note that one of the outstanding features of the reorganization work which was accomplished among American industrial companies in 1921 was the consideration given to holders of contracts for the delivery of merchandise. There were also too many instances of businesses which without flinching, accepted deliveries, involving heavy losses to justify any concern about business morals.

The effect of each cancellation was,

of course, to delay liquidation and place the loss on the then holder of goods. Even the time-tested policy of "hedging," by which manufacturers whose raw material is a speculative commodity, such as grain or cotton, with an organized public market, protect their forward sales by buying "futures," proved a boomerang. In the summer of 1920 corn sold at $1.75 per bushel. The manufacturer of corn products who sold ahead into the fall months in accordance with his custom "protected" his position by buying September or December futures. When corn crashed below $1 and his customers canceled their orders, he was "caught long" on his hedging trades and in many cases suffered tremendous loss. There is an interesting instance of one manufacturer in the West who "gambled" instead of "hedging." He took his chance of being able to buy corn and was not harmed by cancellations. For once a policy held to be reckless succeeded where the conservative course failed.

It would easily be possible from consideration of such cases to fall into the error of believing that business is so badly organized that it can have no sound rules, that instead of following rules one should be bold or conservative as he may appraise the immediate future. But such cases prove nothing of the kind. The immediate future in any business is too difficult of appraisal. Without sound policies he may be right regarding the future ten times, only to lose his entire business the eleventh time. Moreover, the business events of the past two years resulted from a tremendous industrial upheaval due to war and the recoil therefrom, and similar conditions are unlikely to arise for many generations. Time-tried policies such as "hedging" will continue to govern and lessen the risks of conservative business men.

On the other hand, the man who did not "hedge" in 1920 may have taken that position because he found the policy of "hedging" in conflict with an equally sound policy in which he believed, and was forced to choose between them. He may have had a rule not to "hedge" when corn was above $1.50. Or he may have been a close observer of business and financial conditions, in which event he knew long before the summer of 1920 that we could not go on much longer exporting $500,000,000 of goods per month more than we imported, to nations which had no means of payment, without a crash in values. No business man should attempt to excuse the mistakes he made in 1919 and 1920 on the ground that everyone else made the same mistakes, for that was not the case. In those years, to an extent probably never reached before in our business crises, many individuals and corporations had correctly read the danger signals, applied the brakes, and avoided inevitable wreck. It is in such circumstances as these that the corporation treasurer who is a student of finance and business conditions proves his value.

The daily papers are not adequate for such study. Too often their financial reporting construes timely warnings as acts of treason against "patriotic" speculators for the rise. They have a tendency to assume that all upward price movements are constructive and all downward movements destructive. But there are other more reliable media of information, financial journals, trade statistics, and the "services" of economic bureaus, any one of which, of those well established, is well worth careful study. They are most worth while if they excite independent thinking, which always brings its own reward. Again, the annual reports of all important corporations present the best possible opportunity to examine

such subjects as financial structure, dividend policies, and the effects of new financing.

VI

But the corporation treasurer will always be most interested in the risks which are likely to attack his particular business. What are these risks, without going into detail, or attempting to do more than call attention to the most important?

If it is a very small business, meeting the living expenses of employees and proprietors is likely to be the primary problem. If these cannot be paid out of profits, they will be paid out of capital, which is usually the beginning of the end. Established gross margins of profit in all retail and in most other businesses are ample to promote success, provided always a sufficient volume of business can be done. But our industrial system has encouraged so very many small businesses, particularly in the retail field, that frequently there is not enough business to go around, and a business man may find himself with only two alternatives, both undesirable, to profiteer or to quit.

When a business has progressed safely beyond this stage, its next hurdle is the obtaining of sufficient credit and capital to finance its growth. At this second stage it will find capital so difficult to obtain without surrender of residuary equities that its best course will ordinarily be to pursue an extremely conservative policy in regard to dividends and "plow back" a large percentage of the new capital it creates. This leaves profits at the further risk of the business, but that is a lesser risk than is involved in going into the open market for capital on burdensome if not destructive terms. It is difficult to command capital on any other terms until a business has well proved its soundness to the public.

The corporation treasurer should never lose sight of the unreality of industrial profits. Not only must profits be plowed back to insure progress, but frequently other profits which are on the books cannot be realized. In a period of prosperity profits are quite as often due to "mark up" of inventory as to effort and accomplishment; such profits are very likely to be followed by a "mark down" quite as great. At such times waste plays an important part among great and small; nor is it confined to labor but permeates the entire industrial structure.

The effect of taxes upon profits needs little comment. The excess profits tax has now been dropped and business has only to consider a maximum tax of 12½ per cent of net profits. It is very important to remember, however, that at least this percentage of profits must be available in cash. It is also worth noting that there is little in the charge of demagogues that business merely passes taxes along to the consumer. The treasurer may not rely on that happy result. There are times when most business can do it; other times when some can and others cannot; and in 1921 there were very few who were not well satisfied to pass their goods to the consumers, let alone any taxes.

"Big business" has certain risks of its own. Competitive or dominant positions must be maintained. Frequently this necessitates new investments which will not be profitable. Even the United States Steel Corporation, that largest of our corporations, after reinvesting $500,000,000 in 20 years, recently failed to earn a quarterly preferred dividend. It would be interesting to know how much of this great reinvestment was made in productive property, and how much in assets not directly or immediately productive, to protect its position against competitive attack.

One hears much about the necessity of controlling sources of supply. This has led mail-order houses to become manufacturers, tire manufacturers to become planters, steel companies to become miners, importers to become shipowners. In almost every case an entirely new business is undertaken with a new and often very great risk on account of inexperience. Such steps to be successful must be well financed before they are taken and must be executed with great care as part of a definite campaign to increase the facilities of or "round out" an industry. When new ventures are undertaken through fear of failure of supply they are so frequently accompanied by haste and so seldom by adequate financing and preparation that they are very likely to meet with disaster. There are many examples, moreover, of companies which have done just one thing over considerable periods with very satisfactory financial results, and there can be no doubt that much industrial misfortune has had its origin in reluctance to allow someone else to make a profit. It is frequently the case that ability to do one thing better or cheaper than one's competitors is all the protection of supply that is needed.

In this connection it is worthy of note that during the period of actual scarcity of merchandise (1919) and through the period of alleged scarcity (1920) the largest of the 5 and 10 cent stores, Woolworth and Kresge, are credited with having held strictly to their own retail business, without becoming manufacturers of articles which were no longer available at prices they could pay. That this was sound policy is evidenced by their strong financial position at the close of 1921, and their excellent earnings all through the deflation period.

The inexorability of compound interest will never be disputed by the shrewd treasurer. Many attempts to dispute it have been made, among them an interesting case of a group of lumbermen who some years ago bought a tract of timber in the south at a price of \$8 per thousand feet without any intention of cutting the timber but merely of holding it as a speculation. Several years went by before these men realized what compound interest was doing to their investment, that in 10 years or less their timber would "stand them" \$16 per thousand, and in 20 years \$32 per thousand. The only way they could hope to make their investment pay was to put in a sawmill which would cut all the timber in 10 years, before compound interest plus taxes should run too far against them. This situation did not exist when the greatest of our lumber fortunes were being started, because timber values were then quoted in cents instead of dollars per thousand feet.

VII

Certain other industrial risks lie quite outside the province of the treasurer, but because he must finance all mistakes they should at least be noted here. There are the entirely technical risks of experimentation and engineering. They are very necessary because through them comes progress. Mr. Henry Ford, however, says with much truth that we are in too great a hurry to put our experiments on the market. And it is only as we do that, that great capital risk is involved. Bearing out Mr. Ford is the story of a chewing-gum manufacturer who attempted to defeat the high cost of his product in 1920 by experimenting with a substitute for chicle. The product was put on the market, and was apparently successful. Later it was found that when it was no longer fresh it crumbled when chewed, and this company is now said

to have an investment in a species of crude rubber which runs into very large figures.

The labor risk does not appear to be very serious from the business standpoint. The weapon of labor is the strike. That it is seldom effective as far as creating a capital risk is concerned is evident from the Wall Street saying that stocks should never be sold on strike news. The very strength of trade unions may be their weakness in this regard. It is their habit to attack entire industries rather than single units. Therefore no single unit suffers relatively and when a strike has been settled, each unit has an opportunity to make up for lost time. Then in all strikes capital has the great advantage of having fewer mouths to feed.

But transcending all other risks in both number and degree are those which come from unsound financial practices. Their avoidance lies entirely with the corporation treasurer. When they are avoided an industry can survive other mistakes with surprising success. Such losses as are taken can be quickly recovered. Well-financed businesses as a rule "come back" very fast.

These risks spring from such common corporate habits as overborrowing, financing after instead of before the fact, permitting an unbalanced financial structure, overcapitalizing unproductive assets, exporting working capital (a recent development which proved devastating), weakening business structure through reorganization, unwise dividend policies, and managing for stock market purposes. These practices will have consideration in articles to follow. The very best practice in each of these important considerations is only what stockholders have the right to expect from the corporation treasurer.

(The second article of Mr. Robinson's series "Current Borrowing in Industry" will appear in the December number of "Administration.")

ADMINISTRATIVE RESPONSIBILITY FOR ADVERTISING FAILURE

BY T. B. HILTON*

EVERY now and then we see figures as to why men fail in business, with percentages applied to the various causes. A recent statement of that kind said that 29 per cent fail because of lack of capital, 15 per cent because of conditions beyond their control, 11 per cent because of fraud, and so on down to the last one per cent.

It would be interesting to see the same kind of statistics on why advertising campaigns fail. There have been so many positive things to learn about advertising we have ignored the negative, but perhaps it is time to look on the darker side. If we see them, we can avoid the quagmires in which others have been caught.

In getting a perspective on this study we need not look into the history of the large advertisers of today. They may have made many mistakes along the road of their publicity progress—undoubtedly did make some—but the executives in charge have put the whole force of their ingenuity and enthusiasm back of their advertising and have pushed on to a successful conclusion. And the ultimate success has in each instance obscured the minor setbacks.

Take the more obvious failures and ask advertising men, "Why have these campaigns failed?" You will get many answers, with incorrect copy or careless space-buying heading the list. If those were really the major causes, the final ones for publicity failures would rest on the advertising managers of the various companies paying for the advertising.

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The executive heads cannot, however, dodge their responsibility to their stockholders by any such subterfuge. The success or failure of any progressive measure—including advertising—rests with the administration of the business, and it is at that door we can lay the blame for many, if not a majority, of the advertising efforts and policies that never grow to successful maturity.

Trace the histories of the next few advertisers who burst into print. In the majority of cases you will find something like this: The business starts on the ideas and ideals of some one man. He gives his close, personal attention to every detail of production and distribution, buys every item of material and operating machinery, hires all the help from office boys up, and knows all his customers and the state of every account.

As the business develops, faithful employees are promoted to heads of departments and given full responsibility for the conduct of that part of the business, or outside executives are brought in to occupy these positions. The business still grows until finally it reaches a point where a decided departure from existing plans is necessary if it is to advance still further. That is, it "has to get bigger to stay as big."

It is then decided to call in the aid of advertising—to employ mass selling to take care of the mass production. The founder and president gives a great deal of his personal time and attention to the selection of an advertising manager, the appointment of an advertising agency, a study of the list of

advertising media to be used, and runs everyone connected with it half crazy pulling to pieces and putting together again every component part of the plan.

Eventually the campaign is ready to shoot. The salesmen are told all about it either in convention or through the house-organ or bulletin. "Dealer education" and "dealer helps" are sent out by the thousands. Then the big boss sits back patiently or anxiously, depending on his temperament, to watch for the tremendous increase in business that everyone assured him was bound to come.

If advertising does anything (and we all know it usually does a lot), it puts the advertiser in contact with new outlets of distribution and new consumers, people who never heard of the firm or product before. To them, the advertiser and his product are brand new. They have no prestige, no standing—they are on trial. To the reader of the advertising, whether he be distributor or consumer, the copy is the only guarantee of the product and a promise of the service offered. If the advertising does its work the personal contact will be built up later.

It is at this point that things begin to go wrong. Whereas in the old days every new problem would have "the old man's" personal attention, now everything is referred to department heads, subdepartment heads, and, far too often, to low-salaried subordinates, some of whom have little interest in the business and others have not the experience or vision to know what is expected of them.

As a result, a part of the unusually large volume of orders—the consumer will buy anything once if it is properly presented to him—is filled with goods not quite up to the standard, shipments are delayed, wrongly directed, or improperly packed. The collection department begins to irritate new customers with requests for payments not yet due, or perhaps for goods never received, and the correspondents write lackadaisical letters that do not cover their subject. Goods are returned for reasons that seem perfectly obvious to the dealer or consumer, but they receive unsympathetic handling. Perhaps they have received something not quite what they expected, but when they look for adjustment they cannot find any point of contact by which they can have the defects corrected, or the goods exchanged.

If you think these situations are exceptional, try buying a newly advertised product, see how often it does not work right, and in such case see what satisfaction you can get from the average house that puts it out.

One lady who was interested by the description in her favorite magazine of a certain manufacturer's goods, decided to buy some of the advertised article on behalf of her young daughter. She did not see the line on sale at any of the stores in which she usually dealt, and postponed her intended purchase until one day she happened to be in an office building where, as she noted by the lettering on the doors, the local sales office of the manufacturing company was located. She entered and explained that she wished to buy a half-dozen of the article if they could sell it to her, or, otherwise direct her to a store where she could get just the size and model she wanted. They referred her to one of the Fifth Avenue shops and when she suggested that they telephone to make sure that the exact size was in stock they insisted that it would be quite unnecessary. So over to Fifth Avenue she went—a tedious trip from that office building on a hot day—only to find that that shop did not even carry the line. They had closed it out without the knowledge of the New York

sales office and were carrying a competing line.

A telephone call in this instance would have saved good-will and would have resulted in a good many dollars' worth of sales per annum for several years to come, but the people in the sales office had never been made to believe that their company wanted any thing but wholesale trade. They had never realized that a sale is not completed until the goods are in the process of actually being consumed and they were not interested in carrying an active prospect, brought in by their advertising, through to the point of sale.

The head of one household saw in an advertisement of canned goods a particularly appealing recipe that, according to the copy, should be made with only that particular advertiser's product. Inquiry at the several grocery stores in the neighborhood developed the fact that they did not carry the line. A letter to the canner referred her to a store more than an hour away on the subway, and there were actually thousands of stores between her home and the one over in Brooklyn. It was a cold, impersonal form letter and did not get results. If a sample can had been sent to supply her emergency needs and she had been told how her grocer could secure stock, a new distributing outlet would have been established, additional consumption created, and another minor victory would have been won by advertising. A small thing in itself, but if the correspondents at the home office had been impressed with the fact that such a case multiplied by several would have amounted to as much business as a small wholesale account, they might have given a second thought to the inquiry before handling it merely as a matter of routine.

One charming lady in a southern city was thoroughly sold on a certain brand of hosiery through a woman's magazine advertising. She went to the six biggest stores in town and asked for it, but without results, so she wrote a postal card to the manufacturer asking where she could buy it. They sent her the name of a store in her city. She called at this store only to find that they had none of that line but the white, and never had had any other shade or color—and it was black she was looking for. You could not sell her any of that manufacturer's product for 25 cents a pair now. Probably the man who sent her to the wrong store because he did not bother to get his facts straight made similar misplays that, in the aggregate, cost his company thousands of dollars—a class of mistakes which never would have been made by a salesman or anyone else who understood how much money and energy it costs to build up good-will.

An eastern manufacturer of a candy novelty spent nearly a thousand dollars in a certain middle western town advertising his products and the name of a distributor. One man was told to get two or three dollars' worth for a party his wife was going to give. Inquiry at several stores developed the fact that they had never heard of it except through the advertisements, so he called up the distributor whose name was given in the copy and found that even he did not have any stock on hand, had not had, and did not know when his supply would be received. Some operating department or departments at headquarters must have known the program had been interrupted before the goods had been shipped, but, so loose was the interdepartment tieup, it had been kept as a secret from the advertising department.

One man bought a 25 dollar sporting outfit that was being advertised in a monthly magazine just before he went

on his vacation last summer. When he got to camp he found part of the outfit, worth about $7 at retail, would not work. He wrote to the manufacturer explaining his predicament and asked for a replacement, as there was no retailer in his vicinity carrying the line. In reply he got a letter referring him to a dealer 22 miles away on roads that were next to impassable. He wrote again, desperately urging that they give him help at any price so long as he got the equipment in time to use on his vacation. The package was finally forwarded to him six weeks after he returned to his home. Certainly no one could well defend operations as inefficient as that. The advertising had done its work, but the value was thrown away because the office did not back it up.

After careful study of several lines one family finally spent more than $45 for a piece of electrical equipment for the home. Attached to it was the manufacturer's 10-year guarantee. Four years later the machine got out of order. The local office of the manufacturer was appealed to over the telephone and the reply was, "Oh, that guarantee isn't good any more because we have gone out of the retail business." That family is influential in its community, and nearly everyone in the community has heard the story. Surely when the manufacturer "went out of the retail business" the executive should have taken the time and pains to explain to the employees how each department would answer echoes of the retail business that were bound to come in—and, moreover, that a change of sales policy certainly did not absolve the company from the obligation on the guarantee.

One manufacturer of children's wear spent several thousand dollars advertising in a certain city that his goods were on sale at "all good dealers." Inquiry at several of the leading dealers in that city developed the fact that they did not carry the line. Certainly "the man higher up" would not have poured his money into that channel if the proper department heads had called his attention to the fact that there was no distribution there.

Ill-will travels fast by word of mouth and is difficult to overcome. Once you instill that attitude in the mind of the consumer towards your goods or service every one of your advertisements supplies an opportunity for the disgruntled one to knock—every display on the dealer's shelves is a reminder of dissatisfaction.

Isolated instances, you may say. But these instances show something fundamentally wrong at the top. Every one of them has been taken from the experiences of manufacturers who used to advertise and do not do so any more.

In such cases there is no telling what excuse executives give to each other and to the outside world for the failure of their advertising, but it is safe to say that the lack of expected results was largely influenced by the fact that their advertising was something apart from their business—it had no administrative tieup with the rest of the organization.

Apparently these people shot their advertising arrow straight into the air hoping hard it would hit something. In any other department of their work they would have taken careful aim. When they send salesmen out on the road they tell their whole organization about it and every branch and department of the business knows what it is expected to do for—and to—the representatives.

How much more important it is that advertising, reaching sometimes millions of possible customers a day, should be a part of the institution!

And how impossible it is for it to function unless the administrative officers get it started right, and see that it keeps going. Otherwise it is entirely too easy for anyone not in the advertising department to ignore anything connected with advertising—and just a little of that frosty treatment can easily nip the tender bud of good-will.

Many of the large advertisers—and some of the smaller ones—recognize this danger and endeavor to combat it. Their conclusion is that the remedy is to be found in enthusing their whole organization—even the office boys and clerks in the minor departments—on their general policy and the obligation to the trade and public entailed by their advertising. Through house-organs, bulletins, and personal talks they explain that, just as the soldiers in the trenches would have been helpless without the service back of the lines, so the advertising is unable to develop the business without the wholehearted co-operation of the people in the factory and office whose jobs are dependent on that business' success.

It is not only the people who come in personal contact with the public who need to understand this. The men who make the goods; those who pack them; the stenographers who type the letters; can all add that little something to their work that renders an atmosphere of service—that makes the recipient or user feel that he is getting something that is worth while—that it is a pleasure to have—that is appreciated even by the people to whom it is a part of everyday life.

When the executives of a company can get that spirit of teamwork into their organization every contact made by the advertising will result in a fusion of good feeling that will continue throughout the years, or as long as the executives continue to hold their ideals before their subordinates.

"Trifles make perfection," Michael Angelo is quoted as saying, "and perfection is no trifle."

THE TRAINING OF "INSTITUTIONAL" SALESMEN

BY HENRY C. LINK*

II—METHODS OF TRAINING

FREQUENTLY the training of salesmen is an activity quite by itself, the result of somebody's idea that it would be a fine thing to train salesmen before they go into the field, or to bring them in from the field in groups to teach them what they should do when they get back. Training of this kind is quite likely to have no close bearing upon the practical aspects of field work. Indeed, the training of salesmen cannot be conducted as an activity by itself. From start to finish — and it is never finished — it must be an exact reflection of the activities of the sales department itself, throughout its whole organization. The training in the classroom must be such that when the student goes into the field he finds the stage already set for the methods which he has been instructed to use. Naturally, if there is a lack of coordination between the various activities of the sales department, this lack will reflect itself in the training of its salesmen and consequently the execution of a clear-cut institutional policy will be made impossible.

1. *A Knowledge of the Products.* When the product to be sold is of a technical or mechanical nature such as sewing machines, calculating machines, automobiles, tires, power equipment, and supplies, etc., a certain degree of technical training is desirable and, in some instances, absolutely necessary. The salesmen of calculating machines or cash registers, for instance, require a definite knowledge of just what each machine can do, the ability to demonstrate how it is done, and the ability to teach a prospective customer how such a machine will meet the peculiar needs of his business. This knowledge is essential before the salesman can even begin to sell his product, and therefore is a fit subject for preliminary training. Such training can usually be given most effectively at the manufacturing center, though in some cases it can also be conducted at a branch store center if, as we may presume, it is equipped with the necessary teaching and demonstrating materials. The only point which it is necessary to call attention to in this connection is the danger of too much classroom or blackboard teaching at the expense of allowing the novice himself to demonstrate again and again, his mastery of the technical knowledge he is supposed to aequire. In other words, the instruetor is prone to do too much talking and the pupil to do too little practicing. The usual result is that salesmen go into the field glib enough of tongue but altogether too awkward with their hands. If I were training life-insurance salesmen, for instance, I should spend at least two hours a day for a week doing nothing but asking questions which required them to use their rate manual and to make computations on paper. So with products of a mechanical nature, I should spend a large part of the training period asking questions which could be answered only by handling the product itself.

2. *Factory Training.* The amount of aetual factory training which a salesman should have is a subject on which opinions are widely divergent. Manu-

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facturing departments naturally are inclined to consider it essential. Sales departments, on the other hand, are prone to consider it an expensive luxury. Expensive it undoubtedly is and, in many cases, not absolutely essential. But that factory experience is desirable few will deny. The more technical a product is, the more helpful such experience is in the making of sales. Therefore, because such training is expensive, some manufacturers make it a particular point to comb their factory force for men who, already having had production experience, may have also the latent qualifications of successful salesmen. The value of this practice can hardly be overestimated; but with the casual relation between manufacturing and sales staffs which characterizes so many industries today, it is a practice which is seldom followed. Nevertheless there is probably hardly a factory which does not number among its workers men and women who with the proper training and stimulus, could be developed into effective sales people even though they have never in their lives made a single sale. Certainly, in selecting for further training men who are already a part of the organization, who already have a considerable knowledge of its products, and about whom the company in turn is fairly well informed, the risk is at least no greater than in selecting new men simply because they apply directly for a selling job. Moreover, the selection of candidates from the manufacturing organization will establish outlets for promotion which will greatly increase the hopefulness of its personnel and which will act as a direct stimulus to more loyal and efficient workmanship. Again, such a practice will result in a more intimate relation between the manufacturing and selling departments of a company, and will thereby contribute no mean share toward the creation of a genuine institutional unity. Finally, from a training viewpoint solely, the selling department will be working with candidates whose knowledge of certain factory processes is an accomplished fact, and hence the expense of giving this knowledge to its salesmen is largely eliminated.

There is a phase of salesmanship upon which this plan bears with particular aptness and that is the element of service. For example, when the owner of an automobile takes his car into a service station for repairs he is seldom sure, when he takes it out, whether the repairs have been properly made or not. The work of most automobile mechanics is notorious for its unreliability. Now, if an automobile company were to take a number of its promising factory employees and give them experience in its assembling and inspection departments, so that they really learned the parts and points of the car, and then distributed the men so trained among the various service stations, the results would be amazing from a selling point of view. These men would probably become foremen-instructors in the service stations to which they were assigned, and would in time raise the quality of the service given to a point which would inspire confidence in the car owner by reducing his maintenance costs. No greater contribution toward the selling of automobiles can possibly be made than this, even though it is not in line with direct selling methods.

3. Instruction in Marketing Methods. A genuine knowledge of the product or line is the first requisite of the salesman; but equally important is the knowledge of how those products are marketed. The old school of salesmanship—and it has many advocates even today—claimed that the best way to train a salesman in marketing his product was to put him in the field and let

him work out his own salvation. This method of "sink or swim, survive or perish" embodies the rugged merits of pioneer work together with its extravagant wastefulness. For every new salesman who perishes under this régime, a number of good accounts may also perish. And even the salesmen who finally succeed may succeed at the ultimate expense of the company they represent. Moreover, this method is diametrically opposed to the very elements of institutional selling. Institutional selling, as we have seen, depends upon the existence of a distinctive, definite, and comprehensive marketing policy. Naturally, a company which has no such policy can do little but allow its individual salesmen to work out their own methods of marketing with the spotty results which have characterized selling in the past. A company, however, which has an institutional policy cannot afford to entrust its execution to the individuality of untrained salesmen. Consequently, it must systematically train its prospective salesmen in the details of this policy so that they can properly interpret it when they go into the field.

Much of this preliminary training can be accomplished in training classes. The subject matter dealt with in these classes will naturally depend upon the nature of the company's marketing policy. It may consist of such topics as the company's advertising, both national and local; the nature of the contract between the company and its dealers, the details of the guarantees behind its products; the service which will accompany the product; how to arrange window displays and the other display material furnished by the company; in short, all those topics which form an essential part of the company's marketing policy and which give it its institutional reputation. And since these details are usually originated by the central sales organization, it is only logical that the training of salesmen should also be centered here, or should at least be sponsored by the central sales organization.

4. Knowledge of Competitive Goods. A company in a competitive field may also find it necessary to prepare its salesmen with some knowledge of the products and methods of its competitors. There is a prevailing notion that the safest practice for the salesman is to ignore his competitors and concentrate entirely upon his own wares. It is difficult to understand the logic of this ostrich-like policy. If a company relies chiefly upon the individual persuasiveness of its salesmen to sell its products, its advantage is not unique because other companies may have salesmen equally as persuasive and magnetic. If a company is superior to its competitors in product, in price, in advertising, in marketing methods, or in any other respects, the practical course is certainly to acquaint its salesmen with the points at which it is superior, so that they can make an intelligent comparison, and so that they can concentrate on the points of superiority. One important tire company has prepared a manual for its salesmen which contains characteristic advertisements of its competitors and analyzes each one with reference to the superior points of its own product. Drawing comparisons is by no means the best method of selling a product; but when a dealer himself insists on making the comparisons, the salesman who is not prepared with adequate knowledge is at a great disadvantage. The only company which can afford not to acquaint its salesmen with facts about its competitors is the company whose products and methods are such that it cannot afford to invite comparisons.

5. Training with Senior Salesmen.

Probably the weakest point in the process of training salesmen is the transition from the preliminary training stage into the field of actual selling. The gap between the classroom and the field, between knowledge and practice, is so great that unless it is properly bridged many prospective salesmen will fail to cross it successfully. Because of this fact, it is the custom in some companies to start its new salesmen in the field under the close supervision of a senior salesman whose success is already established and who will guide his junior in the process of translating his newly acquired theoretical knowledge into actual sales practice. This is an excellent plan but one which must be used with caution; for unless the senior salesman is well grounded in the institutional methods which the sales department is trying to put into effect, he is likely to undo all the valuable training which the junior salesman has just received. Indeed in many companies which are just getting an institutional method of selling under way, it is more important to train the old salesmen than to train the new; for as long as the former persist in their long-standing individualistic methods of selling, they will corrupt newly trained salesmen almost as fast as they are put into the field. On the other hand, unless the preliminary training is of such a character that it fits directly into the practical situations of the field, the results will also be disastrous.

6. Co-ordination Between Advertising and Selling. The belief seems to exist that the defects of insufficiently trained salesmen and the uncertainties of the human equation can be smoothed over by an extensive campaign of institutional advertising. To a certain extent this object can probably be attained, but at a great cost, and leaving many loop-holes. An advertisement may tell all the world the same facts about a company and its products, but at the same moment hundreds of salesmen and thousands of dealers are interpreting the company to the buying public each in his own way. Obviously an advertising campaign, no matter how excellent or extensive, depends for its success upon the degree with which it is co-ordinated with a highly finished distributing mechanism; and when this mechanism consists largely of independent dealers, dealt with by individual salesmen, a comprehensive and fully co-ordinated system of training is absolutely essential.

7. Training Through District Sales Branches. The training of salesmen by a business enterprise of national scope is often conducted by its district offices or under the supervision of its branch store managers. This method has the advantage of being flexible in that it allows sufficient emphasis on territorial conditions and eliminates the expense of long railroad journeys to the home office. On the other hand, it has the disadvantage of too much flexibility in that each district manager is likely to have his own conception of what his company's methods of selling and distribution should be and will therefore instruct his salesmen accordingly. The resulting variations are quite likely to be destructive to the development of a genuinely institutional method of marketing. If this condition exists, and if the central sales organization has a clearly defined policy for what it wishes to do or not to do (it is assumed of course, that any policy determined upon is one which takes into consideration the field in all its parts) the first step in the training of its salesmen is naturally the training of its district managers. The chain store method would have little virtue if each chain store manager conducted his store in his own way. The principle involved

here applies also, if not so obviously, to the less mechanical methods of marketing. Unless district managers can be brought into an agreement with regard to the outstanding features of their company's marketing policy, little need be expected from them in the way of training salesmen. Even if an agreement among supervisors is achieved, it will still be necessary to instruct them in the methods by which it is to be translated into a uniform process of training institutional salesmen. The importance of this phase of training salesmen cannot be overemphasized for no plan of training, however high its merits, will succeed beyond the point at which it succeeds with the supervisors or district managers to whom the salesmen in the field are directly responsible.

8. Training by Correspondence. Since variations in a company's policy must constantly arise, and since, therefore, a salesman's training is never complete, the methods enumerated above will not suffice to cover every point at which training must take place. The formal type of training must therefore be supplemented by a more flexible method. The method which is used by many companies is a correspondence course, more or less informal, by which the training already given is reviewed or checked up and new ideas and new material conveyed. The most important detail in the success of such a course is a method of making sure that the salesman actually reads and digests it. This method may consist either of questions which the salesman is required to answer in writing or of questions put to the salesman verbally by his supervisor or district manager, or a combination of both.

9. The Sales Convention. The success of salesmen is due to inspiration as well as to knowledge, a fact which is recognized in the institution of the periodic sales convention. The sales convention, with its well-known paraphernalia, is calculated to make the assembled salesmen realize what good fellows they are, what a wonderful company they are working for, and in general to inspire them with the determination to do or die. It is often a time when the officers of a company display an amiability and tolerance which they seldom duplicate in their ordinary relations with the selling force. The sales convention is admirably adapted to furnish inspiration to salesmen but there is a distinct danger that this inspiration may be of the sentimental and ephemeral type rather than a kind which works directly into the important details of the company's marketing policy. It is not surprising that some companies have found the results of their conventions so meager in comparison with their cost that they have decided to discontinue them. One convention of the old-fashioned kind in which I participated, at which most of the time was devoted to high-sounding speeches from the platform, and impromptu—often inopportune—speeches by the salesmen from the floor, was obviously so inadequate that it was decided never to hold such a convention again. The following year the plan of the convention was radically changed. There were a few general assemblies of all salesmen with speeches of a general and inspirational character, but even these speeches were prepared so as to furnish inspiration for the actual work of the convention. The actual work was accomplished by dividing the hundred odd salesmen into eight separate groups of about fourteen each with a regular daily schedule of group meetings covering five days. There were eight group leaders, each one an expert in his particular sales specialty, and every leader met every group three or four times during the week for periods of

50 minutes. Among the eight phases of salesmanship which were taken up in this fashion were:

1. The construction of the product
2. The company's advertising
3. Window display methods
4. Dealer service
5. Salesmen's reports and correspondence
6. Competitive lines
7. The qualities of a successful salesman
8. How to cultivate the qualities of a salesman

The material under each of these headings was carefully prepared and co-ordinated so as to reflect accurately the outstanding features of the company's policy. At the end of the week a two-hour written examination based upon the group meetings was given to all salesmen. The entire program was carried out so as to reach a climax in the banquet given on the evening of the fifth day and the salesmen who stood highest in the written test were awarded handsome prizes at that time.

The sales convention has undoubtedly great possibilities from an inspirational point of view but it will realize these possibilities only by harnessing the emotional forces aroused with the practical details of a comprehensive selling technique. Obviously, to the extent to which a company's marketing technique is indefinite or incomplete, it must rely upon the emotional stimulus alone; whereas the company which has developed a comprehensive policy of institutional selling can strike a nice balance between inspiration and operation.

10. Visual Instruction. The National Cash Register Company is conspicuous for the high state of perfection to which it has developed its sales convention. This company conducts its convention upon the theory that more than 75 per cent of all that we learn is learned through the medium of vision. Consequently, fully 75 per cent of its program consists of pageants, plays, demonstrations, and motion-pictures. Speeches are at a decided discount. Certainly, there is less danger of overestimating the value of the visual method than there is of underestimating the value of the oral method.

11. Training by Educational Agencies. If this analysis of the training of institutional salesmen has been correct, the answer to the question—How, and by whom shall these salesmen be trained?—ought to be self-evident. Obviously, the training of salesmen for a particular institution cannot be done by any agency except the institution itself. The very essence of institutional selling is to be able to represent a particular institution, and each institution is one by virtue of characteristics and methods which are peculiar to it. Nevertheless, there is a field in which educational agencies may be able to carry on the training of salesmen, probably to better advantage than can particular business institutions.

If we assume that the salesman of the future will be a considerably higher type of man than the salesman of the past, with a broader education and background, some kind of general preliminary training will be in order. What will be the nature of this training?

In the first place, an educational institution may train prospective salesmen in a knowledge of human nature from the theoretical point of view. The general courses in the art of salesmanship which deal in methods of approach, the direct and indirect appeal, the study of human motives, and the human aspects of selling which are more or less characteristic of salesmanship under any circumstances, can probably be taught much better by educational institutions which make this their business than by individual companies.

In the second place, these institutions could give courses in marketing methods so that, even before the salesman has become identified with a particular company, he would have a general idea of what might be involved in the work which he would later choose to undertake. Moreover, such a course would enable the prospective salesman to determine beforehand which of the many types of salesmanship he was best qualified for or most inclined to follow. This result alone is very valuable; for when salesmen who have had this preliminary training later identify themselves with a company which falls within the field of their chosen activity, the likelihood of this company's success in training them in the details of its own marketing methods would be much greater.

In the third place, there are certain fields of salesmanship which have many elements in common and in which, therefore, a more or less technical preliminary education is possible. For example, the selling of life insurance involves a knowledge of facts many of which are common to all life insurance companies no matter what the details of their insurance policies may be. Indeed, the Carnegie Institute of Pittsburgh conducts a school solely for the training of life insurance salesmen. Similar schools in other fields are undoubtedly possible.

THE POSSIBILITY OF BUSINESS FORECASTING—CORRELATION

BY RAY VANCE*

IN a previous article[1] we have defined forecasting as "foresight of consequences and provision against them." In this article we shall center our attention upon the foresight of consequences.

To attain this foresight in a measure that is really worth while means that we must be able to recognize the symptoms of a coming movement in any factor by a sufficient length of time and with sufficient accuracy to make provisions against the consequences which will secure greater safety and better profits than would be possible by a simple routine conduct of business operations. Such a recognition is a possible accomplishment, but it is by no means a simple one, and we shall be more successful in the ultimate accomplishment if we thoroughly recognize at the outset the difficulties and dangers involved.

The conditions which confront the business forecaster and which not only cause him difficulties but also may lead him to make dangerous errors have been stated briefly in the previous article already referred to, but we may give them here in more detail:

1. It is possible for a given event occurring in advance of an economic result to be mistaken for one of its causes, although actually the cause and effect relationship between the two is negligible or wholly nonexistent. For this reason factors used as statistical forecasters must always have a logical connection with the result anticipated, and this connection must be sought by reason rather than by statistical manipulation, although, negatively, statistical tests may be used to reject factors which logically we might consider useful.

2. No economic happening such as the rise or fall of a given price or of prices in general, or the increase or decrease of volume of business in a particular line or in general business, is ever the result of a single cause. Like causes turn like conditions into like effects but, in actual practice the conditions are never twice exactly alike.

3. Many of the causes for economic movements are not subject to accurate statistical measurement. Therefore, we can never hope to cover absolutely all of the composite of causes for even a single economic happening.

4. No similar economic happenings such as noted in previous paragraphs, are ever the result of an exactly similar combination of causes. Therefore, even if we should determine absolutely all of the causes of some one given movement, we should not be able to make a positive cause-to-effect forecast of the next similar happening.

II

It is worth while to consider here the statement so frequently made that when a certain mixture of economic conditions exists, then the outcome can be just as certainly predicted as can the outcome from the mixture of certain chemical elements. With the underlying idea of this statement the writer is in entire agreement, but with its implication that economic elements can be weighed, measured, and mixed in isolation as chemical elements are in a test tube or in a retort, he has very little patience. If we pour hydrochloric acid on a piece of zinc in a vacuum, we can forecast with 100 per cent cer-

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[1] See *Administration* for October, 1922, p. 403.

tainty that the result will be the formation of zinc chloride and free hydrogen, but if we pour the same hydrochloric acid on the same zinc in the presence of the ordinary atmosphere, then we shall have zinc chloride and, not free hydrogen, but ordinary water.

If we carry the illustration one step further and pour the same hydrochloric acid upon a heap of scrap metal, which we know contains zinc, but which we know to contain certain other metals, and which is likely to contain still other metals whose presence is not known to us, then we come to a point where the forecasting of the chemical reaction cannot be accurate, and where at best, we shall only be able to arrive at an approximation of what the result will be. The mixture of economic elements, which occurs in actual business life is far more like pouring the acid on the heap of scrap metal than it is like the isolated mixture made in the test tube.

Now keeping in mind the difficulties we have just set forth on the negative side of business forecasting, we may proceed to the discussion of the positive results which can be accomplished in spite of these difficulties. These results are obtained by virtue of what statisticians call "correlation" between certain economic happenings. Professor Karl Pearson has defined correlation by saying:

When we vary the cause, the phenomenon changes, but not always to the same extent; it changes but has variation in its change. The less the variation in that change, the more nearly the cause defines the phenomena, the more closely we assert the association or the correlation to be. It is this conception of correlation between two occurrences embracing all relationships from absolute independence to complete dependence which is the wider category by which we have to replace the idea of causation. Everything in the universe occurs but once. There is no complete sameness of repetition. Individual phenomena can only be classified, and our problem turns on how far a group or class of like, but not absolutely same, things which we term "causes" will be accompanied or followed by another group or class of like, but not absolutely same things which we term "effects."[2]

Another writer defines this correlation as follows:

When two quantities are so related that the fluctuations in one are in sympathy with fluctuations in the other, so that an increase or decrease of one is found in connection with an increase or decrease (or inversely) of the other, and the greater the magnitude of the changes in the one, the greater the magnitude of changes in the other, the quantities are said to be correlated.[3]

III

These definitions were written for students of statistics, and perhaps we can simplify and at the same time make them more concrete in their application in business forecasting by a restatement as follows:

1. When any one given cause of a given economic happening (such as change in price or a change in volume of production) varies, there is the same tendency (larger or smaller as the case may be) for the effect (price level, volume of production, etc.) to show a similar variation, and it is self-evident that variation in the effect must appear at a later point of time than variation in the cause.

2. If two economic happenings are results of the same general group of causes, then there will be a tendency for a given fluctuation in one of the results to be accompanied by a similar though not identical variation in the other result. It will frequently happen that throughout a series of variations one result from the same general group of causes will consistently appear at an earlier point of time than another result from this general group of causes; an exam-

[2] Pearson, Karl, "The Grammar of Science," p. 157.
[3] Bowley, A. L., "Elements of Statistics," p. 316.

ple of this being the fluctuation of industrial stock prices in advance of changes in general industrial conditions. In all such cases, in default of being able to measure all statistical causes of either movement, we may use the correlation between the two results as a method of forecasting the variations in the result.

3. If we are able to measure statistically more than one of the economic factors which are correlated with the movement we seek to forecast, then, by combining these factors in a properly weighted composite or average, we can more nearly approach a complete measurement of the variations in the entire composite of causes for the effect under consideration, and shall find our correlation improved, or, stated in simpler words, we shall be able to forecast more accurately.

These conditions surrounding attempts to forecast business or investment movements are now fairly well recognized by all who really deserve the name of scientific business forecasters but the history of attempts at business forecasting can only be understood by remembering that many of those who have attempted forecasting have had but the haziest ideas of these fundamental principles. Even today the vast majority of investors and business executives are making disastrous mistakes in business foresight because they judge the future from too narrow an outlook, and think that because a specific cause was followed by a specific effect at some time in their previous experience, the same cause must be followed by the same effect again, and that there can be no other effect, no matter how surrounding conditions may vary.

As an historical example of confused business forecasting we may take the "sun-spot" theory of Stanley Jevons, who holds a secure place in fame as one of the earliest scientific writers on economics, but who after discovering that certain variations in spots on the sun had been followed by variations in the crop yields of India and these in turn by depressed business in Europe, sought to make the variations in the sun-spots a forewarning of coming periods of prosperity or of depression. The sun-spot theory has disappeared long ago, but even yet we have prominent business economists who consider crop yields as the one great cause of business prosperity or business depression. This theory hardly seems worth discussion when we remember that the panic of 1907 was preceded by an exceptionally good crop in 1906, and accompanied by the gathering of another exceptional crop in 1907, while again in 1920 the great depression was preceded by a little better than an average crop in 1919 and accompanied by an exceptional harvest in 1920. It is a fact that "other things being equal" a good crop yield would produce business prosperity. The difficulty with such pleasantly simple forecasting methods is that the "other things" rarely are equal. Therefore, one who wants to make his foresight more valuable than that which comes to the ordinary routine business worker, must expend more labor than is involved in these superficial views of a situation, or else must secure the results of such labor from some other source.

IV

We may take a simple example to show how correlation together with other principles discussed earlier would be applied to a concrete problem in economic forecasting. Let us take for our goal the making of a forecast in March of any given year to indicate the probable acreage of cotton that will be harvested in continental United States during the months of the following fall.

The changes in cotton acreage constitute a "periodic" rather than a

"continuous" movement, in that there is bound to be one change and no more in each year, therefore we may disregard the time element in this instance. But whatever period of years we choose for a sample, we find that over any stretch long enough to be truly representative, the number of increases and decreases are approximately equal, therefore, it is highly important to forecast direction. The extent of fluctuation from the previous year has varied from 0.2 per cent to 20.1 per cent so that the extent of fluctuation is also a factor of real importance.

To get a concrete conception of our problem let us examine the 20 years from 1901 to 1920 inclusive. We find that one who in each March based his business policies upon the assumption that cotton acreage would be the same as that of the preceding year would have missed his calculation by an average of 6.5 per cent and that in one year (1906) he would have been wrong by 20.1 per cent. We know in advance that some of the factors causing these variations in acreage cannot be statistically measured. For example, in March of any year we cannot tell what effect variations from the average of weather conditions are going to have upon planting and upon subsequent abandonment before harvest. For that reason we may restate our goal by saying that we shall seek to make our forecast average more nearly accurate than 6.5 per cent and more especially, since the larger errors are the ones most harmful in forward-looking business plans, we shall seek to reduce the greatest error from 20.1 per cent.

Our first step, then, is to seek, by a study of the field, those factors which influence the cotton planter in either increasing or reducing his acreage. We have already rejected weather conditions if they cannot be known when the forecast must be made, and for the same reason we must reject all price fluctuations or other conditions which occur after March 1.

Probably the most prominent factor in the discussions of cotton acreage by cotton planters, and by business men and bankers of the cotton belt, is the price at which producers have been selling their previous crop. We may, therefore, take for our first approximation a correlation between variations in the average spot cotton prices for the five months October to February of each cotton year from those of the preceding year. Working out this correlation mathematically we get the indicated percentage changes shown in column 2 of the accompanying table, while column 3 shows for each year the spread existing between this March forecast and the actual results as reported by the Department of Agriculture which are shown in column 1 of the same table.

V

Summing up the improvement which this first correlation makes in our forecast of the cotton acreage to be harvested, we find that on the average we have missed the actual result by only 5.1 per cent as against 6.5 per cent for the man who makes no forecast at all, and more important still our greatest error in any single year has been reduced from 20.1 per cent to 13.6 per cent. This illustrates the principle that variations in one of the causes tend to produce similar variations in the effect, but at the same time it remains apparent that variations in the effect are very far from being identical with those in this single cause. We may now go further by introducing a second cause.

The next factor worthy of consideration is that changes in the cash price for cotton do not always represent the

actual changes in purchasing power of the cotton producers. Variations of general commodity prices in the opposite direction from cotton prices will accentuate the change in purchasing power, while changes in the same direction will decrease it. If a small variation in cotton prices is accompanied by a larger variation in the average of commodity prices in the same direction, then the real change in cotton purchasing power may be entirely reversed.

It is also true that when other prices are rising, the cotton planter himself and his labor will be more likely to turn to other production where profits and wages may be rising. Conversely, when general commodity prices are falling they will be more likely to turn back to cotton production. The second factor to be introduced in our composite, then, is the relationship between the price movement of cotton and Bradstreet's commodity price average. Taking the composite of these variations and of the spot cotton prices used in the first approximation, we come to the second approximation shown in column 4 of the table with the resultant errors shown in column 5. We now have an average error of 4.7 per cent with a greatest single error of 12.3 per cent. This illustrates the greater degree of correlation as we increase our number of factors. Without taking each separately, we shall add still more.

Other items which logically appear to be correlated with the variations of the cotton acreage, and which prove to have such a correlation when statistically tested, are:

1. The amount of cotton still carried in the hands of producers in March
2. The tendency for a year of exceptionally high increase or decrease to be followed by a movement in the opposite direction
3. The secular trend to increase acreage

When all these three factors have been introduced into our composite for correlation, we come to the final fifth approximation which reduces the average error to 3.6 per cent and the greatest error for any one year to 10.5 per cent.

In taking this illustration of the forecasting of the cotton acreage, selection has been purposely made of an instance in which the importance of these factors which cannot be statistically measured is readily apparent to the casual reader. We have already spoken of the error which must necessarily be introduced through inability to take into consideration variations in the weather conditions which are still to come when the forecast is made. It is, therefore, interesting to note that of the three cases where the error of the forecast exceeds 6.5 per cent one occurred in 1910 when an excessively wet summer caused abnormal abandonment, and another in 1911, a year of exceptionally favorable weather conditions. The third came in 1917 when mobilization of possible laborers kept acreage heavily below the estimate. Such errors as those of 1910 and 1911 could not be avoided by any statistical correlation, nor could they be predicted by human judgment, but the 1917 error illustrates the necessity of keeping awake to the importance of factors which cannot be included in any correlation formula extending over a large number of years, because in most years these conditions do not actually occur.

It is interesting to note that in 1921, when the Department of Agriculture made such a serious mistake in its forecast, a prediction based on this method and published March 21, placed 8,500,000 bales as the probable crop (an error of only 523,335 bales) while the government estimate published October 1, carried an error of about 2,000,000 bales. In 1922 the prediction based on this method and published on March 20, was only 51,000 bales at variance

COTTON ACREAGE FORECASTS 1901–1920

Year	Per Cent Change in Actual Acreage Harvested	1 Approximation No. I		2 Approximation No. II		3 Final Approximation	
		Expectation —Per Cent	Error —Per Cent	Expectation —Per Cent	Error —Per Cent	Expectation —Per Cent	Error —Per Cent
1901	+ 5.7	+ 6.9	1.2	+ 9.9	4.2	+ 8.3	2.6
1902	− 0.4	− 4.1	3.7	− 5.3	4.9	+ 1.3	1.7
1903	+ 3.3	+ 1.7	1.6	+ 0.6	2.7	+ 0.5	2.8
1904	+ 7.3	+10.3	3.0	+13.1	5.8	+12.5	5.2
1905	−13.1	− 7.5	5.6	− 9.3	3.8	+14.2	1.1
1906	+20.1	+ 7.1	13.0	+ 7.8	12.3	−14.0	6.1
1907	− 0.2	− 1.0	0.8	+ 3.2	3.0	− 2.7	2.5
1908	+ 3.6	+ 1.5	2.1	+ 3.9	0.3	+ 3.3	0.3
1909	+ 1.3	− 4.2	2.9	− 4.7	3.4	− 3.9	2.6
1910	+ 1.1	+12.9	11.8	+11.4	10.3	+ 9.5	8.4
1911	+11.2	− 0.1	11.3	+ 0.8	10.4	+ 0.7	10.5
1912	− 4.9	− 7.8	2.9	− 9.8	4.9	− 8.4	3.5
1913	+ 8.2	+ 6.6	1.2	+ 5.9	2.3	+ 7.6	0.6
1914	− 0.7	+ 1.4	2.1	+ 3.2	3.9	+ 2.7	3.4
1915	−14.7	− 9.9	4.8	−12.4	2.3	−18.1	3.4
1916	+11.4	+14.3	2.9	+10.7	0.7	+17.6	6.2
1917	− 3.3	+10.3	13.6	+ 4.3	7.6	+ 3.8	7.1
1918	+ 6.4	+15.7	9.3	+ 8.3	1.9	+ 6.9	0.5
1919	− 6.8	− 0.1	6.7	− 0.9	5.9	− 9.3	2.5
1920	+ 6.9	+ 6.4	0.5	+ 4.0	2.9	+ 6.9	0.0
Average error			5.1		4.7		3.6

with the August 1, government report. Thus it may be used to guard against the acceptance of false estimates or to anticipate reasonably accurate ones.

VI

It will be noted that the writer does not believe that all important economic happenings can be forecast from one general statistical barometer. There is a general business cycle which cannot safely be disregarded in any specific forecast of an individual commodity price or of any other particular economic happening. Construction of a barometer for that general cycle involves time considerations rather than direction of variation and its construction is somewhat more complicated, but the underlying principle of correlation is the same. In the meantime it is well to illustrate with this simpler barometer, both because its simplicity gives an easier grasp of basic principles, and because it shows the value of specialized efforts as against all inclusive forecasts from the inadequate basis of a single general barometer.

Summed up, then, there are very serious difficulties in the way of making any forecast of business conditions from a statistical basis, and such difficulties make 100 per cent accurate forecasting an absolute impossibility. On the other hand, when these difficulties are intelligently recognized, it is possible through correlation to make the statistical basis a tremendous aid to human judgment in such foresight of coming economic consequences as will permit provision against them.

BUSINESS FORECASTING IN THE EDISON INDUSTRIES

BY HARRY F. MILLER *

II—CASH CONSERVATION BY MEANS OF THE BUDGET

THERE is no matter of more importance in business than the conservation and control of cash. Experienced business executives often state, axiomatically, that it is easier to earn money than to save it. Just what dividends care and exactitude in the handling of cash will pay depends on the completeness of the cash control.

It is also obviously advantageous for all businesses, but particularly those of a seasonal nature, and those that have to accumulate goods for future sale, to be able to anticipate their financial requirements.

To sum up the whole matter, every business operation, in the last analysis, affects cash. A procedure, then, which results in conserving cash resources, the better controlling of cash income and outgo, and the forecasting in advance of cash position is obviously of vital importance to the proper conduct of any business. All this can be accomplished by means of the budget.

II

Just what form the budget shall take is a matter of convenience in any particular organization. If it is to serve its purpose, however, it should be so designed as to enable the treasurer and every other officer using it to see in advance just where the company's funds are going. Requirements may be met and important economies may result from such foresight—economies which could hardly have been foreseen and effected by any other means.

For instance, some Edison manager may receive a telephone call drawing his attention to the fact that the outlook for the month might be improved if he will make certain specific curtailments in expenses—a fact disclosed in advance by the budget. Or, on the other hand, the manager of an Edison business may be asked to be ready for the payment of a cash dividend at the end of the current month.

The most urgent cash requirement of all, though, is usually for funds to meet the pay-roll. Certainly it is necessary to know in advance what this will amount to, and whether or not it can be met from current funds without temporarily straining the company's finances at any point.

Also, the government's demands for federal, state, and local taxes must be provided for in advance, otherwise interest and penalties will accrue. And interest on outstanding bonds may have to be provided for.

Also, cash discounts, one of the income sources of the business, must be taken advantage of to the full. And, notes and bills payable must be provided for and if there are outstanding bank loans, these must be liquidated and cleared off in due time or otherwise the company will be in the position of borrowing what should be temporary funds for permanent investment, and its credit standing be affected.

The properly constructed budget not only shows all coming cash requirements, but also shows what cash re-

* Treasurer, Thomas A. Edison Industries; article prepared in collaboration with Ralph H. Allen, Assistant Financial Executive, and Joseph J. Mehl, General Auditor, Thomas A. Edison Industries.

ceipts may be expected, thus giving the officials of the company ample notice of any financing that may be required for the period.

III

The first step in the preparation of the cash budget naturally takes the form of a simple statement of the anticipated cash receipts and expenditures. The forecast receipts from accounts and notes receivable reported by the credit department together with any extraordinary items, such as income on investments, and items of miscellaneous income, such as sale of equipment, scrap, etc., are entered, and the total probable receipts established. The forecast expenditures are then entered in similar fashion, the difference indicating the surplus or deficit of funds for the period.

The cash balance at the beginning of the period, together with the surplus or deficit from cash operations during the period, will give the forecast cash balance at the end.

As it is necessary to keep certain minimum bank balances in order to preserve credit lines, and certain petty cash funds are needed, a statement should then be prepared to show what balances are necessary. For example:

Required Minimum Balances

Bank X.............	$30,000
Bank Y.............	100,000
Bank Z.............	70,000
	$200,000
Petty Cash Fund.....	10,000
Necessary Balance....	$210,000

IV

The difference between the forecast cash balance and the necessary balance must be taken care of in some way. When the budget indicates that the cash disbursements will exceed the cash receipts, the ability to see this in advance is often half the battle of securing financial assistance. The condition may be due to:

1. Seasonal or special requirements
2. A subnormal business period

In the first case, it will probably be necessary to secure temporary funds only, and an ordinary short-term bank loan or issue of commercial paper will meet the requirements.

In the second case, the first step is to get the business house in order. A balanced curtailment program may be necessary. Expenses may be reduced and pay-rolls cut.

If this is not sufficient, or, if for good reasons, no retrenchment in expenses is desirable, recourse must be made to outside financial assistance. Credit standing is not built in a day. It is the result of known reliability and sound principles. Granted that it exists, these questions must be answered:

1. How much money does the business need?
2. How long will it be needed—and how shall it be repaid?
3. From what source shall it be secured?

The possibilities usually are as follows:

(a) Banks
(b) Commercial Paper
(c) Bond Issue
(d) Stock Issue

The answers to questions 1 and 2 are found in the budget forecast.

The answer to question 3—"From what source shall it be secured?"—is not always an easy one. Generally speaking that method of financing which is cheapest over the period covered is best. Analysis of interest rates is necessary and that is not all—there are always surcharges connected with floating note or bond issues, which

sometimes result in adding possibly 2 or 3 per cent to the regular rate. Investigation will usually disclose the best course to follow in any given case. Owing to the advance information of the budget the details of the plan may be laid out in advance without last-minute, hasty decisions. With the object in view and time to accomplish it, there should be no excuse for not adopting the most economical means, provided the budgeting plan used as a basis is good.

V

In the case of funds in excess of current needs, and a safe margin above these, the surplus may be disposed of or invested as the conditions may indicate. Some of the more usual ways of using such a surplus are:

1. Reduction of liabilities
   (a) Anticipation of Accounts Payable
   (b) Repayment of bank loans
   (c) Purchase of outstanding bonds, or retirement of preferred stock
2. Advertising—Special sales promotion fund
3. Conversion into other assets
   (a) Purchase of United States government obligations or other seasoned securities
   (b) Acquirement of ownership in another plant manufacturing materials used by the purchasing plant
   (c) Additions to plant facilities
4. Miscellaneous
   (a) Dividends
   (b) Industrial welfare work

This does not, of course, cover exhaustively the important subject of the utilization of surplus funds, but is merely suggestive.

The treasurer whose budget indicates a probable cash surplus presents the budget with his recommendations to the responsible executives who are thus able to decide far in advance relative to the reinvestment program.

VI

In order to secure the data necessary for the assembled cash forecast, the subsidiary records usually forming part of any good accounting system must be kept. Such are the Notes Payable and Notes Receivable Registers, and monthly schedules, analyzing the totals of notes receivable and payable into the various months during which they become due.

The cash forecast itself, though frequently found, seldom contains the detailed data so necessary to the assembling of an accurate forecast. The form of the cash budget as used in the Edison Industries is given on page 556.

VII

Comment on the data appearing in the treasurer's cash estimate shown above may be made as follows:

Receivables. [1] The estimate for the item "Receivables" is supplied by the credit manager. In the case of notes receivable, the credit manager's estimate should be checked with the treasurer's statement of monthly maturities of notes receivable, and any differences in results discussed and explained.

In the case of accounts receivable there are at least two means of checking the credit manager's estimate. The records will show that in each month the collection of a certain percentage of the previous month's sales may be expected. For example, in November:

10 per cent of the September sales
80 per cent of the October sales
10 per cent of the November sales

A second plan of checking the credit manager's estimate is to compute the average number of days that it takes to convert accounts receivable into

[1] A more detailed discussion of receivables will appear in a later article of this series under the discussion of the credit manager's forecast of collections.

TREASURER'S BUDGET *

Cash Estimate, Month of May, 1922

	M Dollars			
	Estimated		Actual	
Balance beginning	....	$503	....	$503
RECEIPTS				
Receivables	$850	.....	$843	.....
Income from Investments	....	.....	....	.....
Notes Payable, Discounted	....	.....	....	.....
Blank Bank (due ———)	100	950	100	943
Total	....	$1,453	....	$1,446
DISBURSEMENTS				
Pay-rolls, 4 at $50	$200	.....	$198	.....
Payments to Vendors	650	.....	655	.....
Expenses	40	.....	38	.....
Accruals, Commissions paid, etc.	10	.....	12	.....
Deferred Charges:				
Insurance Premiums	6	.....	6	.....
Interest on Bank Loans	2	.....	2	.....
Bonds Redeemed	100	.....	100	.....
Notes Payable, Repaid X Bank	100	.....	100	.....
Notes Payable, Repaid Y Bank	100	$1,208	100	$1,211
Total	....	$245	....	$235

* Thousands omitted. The figures used in this statement are theoretical, and not representative of any particular business.

cash. If the average monthly sales are $800,000 and the average accounts receivable $800,000 also, it is evident that one month's sales are being carried in the accounts. Or, expressed in other words, that collections are on a 30-day basis. Percentages based on the foregoing must be altered to suit seasonal changes.

Income from Investments. Under this heading appears the income from any securities owned by the company such as interest on bonds, dividends on stock, etc.

Notes Payable Discounted. If bank loans have been found to be the best means to provide for a forecast cash deficit, the proceeds will appear under this heading.

Pay-Rolls. The treasurer or other official in charge of the pay-roll should have a current knowledge of its amount, the number of employees, and any probable fluctuations therein.

Payments To Vendors. There are three plans for reaching the forecast payments for the period covered by the cash estimate on account of goods purchased.

1. Over a period of time it will be found that a certain proportion of the purchases during one month will be paid within the next, and the balance, perhaps, paid the month following.

2. It will usually be found that the payments during any one month bear a very nearly fixed proportion to the outstanding accounts at the end of the previous month.

3. It is always possible to have the bookkeeper comb over the accounts payable and list the coming month's maturities. Under this method it is necessary to estimate payments on account of the current month's purchases not yet made or posted.

Whichever method is used, it must be borne in mind that the result is only an approximation, modified by such factors as special terms, datings, etc.

In our own experience, the accuracy of the last method is no greater than that of the other two because of the element of uncertainty mentioned. We therefore use both of the methods first mentioned, the one acting as a check on the other.

In connection with the first method it is notable that often substantially the same percentage of purchases are recurrently settled for in cash within each month. For instance, in November, the cash payments for purchases may be as follows:

5 per cent of September purchases
75 per cent of October purchases
20 per cent of November purchases

These percentages are ascertained by conference with the purchasing agent and the treasurer.

Expenses. This heading covers such current items as freight, not chargeable to inventories, expenses of salesmen and others, rents, and any other payments which would not be important enough to call attention to by special headings in the budget.

Accruals and Deferred Charges. Expenses belonging in part or in whole to a period other than that in which they are paid appear under these headings.

Segregation of expenses into three classes, i.e., Expenses, Accruals, and Deferred Charges, facilitates the work of co-ordinating all subsidiary budget-forecasts into the Balance-Sheet-Profit-and-Loss Statement. [2]

VIII

One of the best means of perfecting a cash budget is to check the estimate for each period with the actual figures as shown later by the books of account. This is a step usually neglected in budget-making. It is probably one of the most important parts of the work.

This may be conveniently done by providing a column headed "Actual" as shown on the preceding budget form, in which the realized figures may be entered. The accuracy of the budgets as compiled from time to time will then be disclosed by this comparison on the budget form itself, and the experience gained can be utilized to make each successive budget a more nearly true forecast.

IX

In this connection it may be of interest to summarize the duties and responsibilities of the treasurer of the Edison Industries.

The primary responsibility of the treasurer is the custody of the funds and securities of the company. Effective discharge of this duty requires a careful record of all cash receipts and disbursements and the deposit of the company's monies as they come into his hands in designated depositories, maintaining always proper balances. Under no circumstances should the treasurer dispose of the funds of the company save by duly signed checks, and with proper vouchers for each disbursement. Vouchers originating outside his department should explain each and every disbursement.

As it is desirable that the treasurer,

[2] The Balance-Sheet-Profit-and-Loss Statement was discussed in the October number of *Administration*.

or his assistant, should have knowledge of every major disbursement, he must actually sign all those checks, drafts, or obligations of the company which require present or future disbursement of the company's funds.

As custodian of articles of value and instruments representative thereof, the treasurer is the logical officer to sign or endorse certificates of stock and bonds. This is the more important as it helps to give him direct and definite knowledge of the flow of funds. Statutory requirements usually make it obligatory for two officers, as the president and treasurer, to sign certificates of stock. The treasurer is almost always —if not always—one of these, and there is an advantage in the dual responsibility which results from such double signature. It would be conceivably dangerous for any one officer, singly, to have power to sign certificates of stock.

The treasurer being responsible for the safe-keeping of articles of value, is charged with the duty of properly bonding all individuals having the same in their direct charge.

Fire insurance, however, depending as it does upon records of the company for which the secretary and not the treasurer is responsible, is within the province of the secretary. In connection with such insurance the treasurer exercises only his usual intelligent supervision of disbursements.

The treasurer must also see that cash discounts are taken for the prompt payment of bills. He is also responsible for the safe-keeping of any notes or bills receivable drawn by creditors in settlement of accounts, and for their presentation for collection when due.

He is likewise responsible for the due issuance of all company notes, whether given as part of the business routine or specifically ordered by the financial vice-president or the directors. It is also the duty of the treasurer to keep proper record of all notes issued, and to attend to their payment or renewal when due.

The principal records which the treasurer keeps in the normal exercise of his functions are as follows:

1. General cash book
2. Notes receivable and payable books and note ticklers
3. List of salaried individuals showing salaries paid, changes in rates, etc.
4. Signature cards showing names of those authorized to sign vouchers and checks, approve petty cash slips, etc.
5. Complete information covering average bank balances, securities, reports, and budgets.

X

For the handling of branch office cash two bank accounts are opened (both subject to deposit or withdrawal by head office), the first for deposit only by the branch office, the second for withdrawal only by the branch office. In the first account all deposits for sales are made, and from the second all withdrawals for expenses are taken. The treasurer sees that the proper balances are maintained, the withdrawal account being replenished every so often by an amount exactly equal to the amount withdrawn as under the system known as the "Imprest System," or otherwise termed "Revolving Fund." Any extraordinary disbursements arising in the branch office should be paid by the head office on receipt of properly O K 'd vouchers.

(Article III will appear in the December number of Administration.)

A MASTER SCHEDULE

BY PAUL M. ATKINS *

IN the "good old days," now happily surely but slowly passing, the average manufacturer was one of the most conspicuous speculators, not to say gamblers, in our economic society. He relied on his intuition, his "experience," a hunch, and other illogical and impractical bases for making the most momentous decisions in regard to his business. Decisions of all kinds were, of course, postponed till the last moment in order to get the very latest bit of news to serve in their making, and often that "latest bit" was the only thing which swayed the decision in the direction it ultimately took.

Now, however, the more progressive business men are turning from fancy to facts and are looking both ways before they leap—back that they may see in which direction it is most desirable to leap, and forward to see how far the leap must be. In other words, they are planning for the future and are basing these plans in part on the definite records of past performance and not merely on what they remembered of past events. The rapid development of cost-accounting and business statistics in the past few years, the recognition of the importance of the service which may be rendered by such individuals as research economists and the reliance placed on the study of past events—the attention given prices, wages, etc., after the Civil War, for example, as a means of judging present possibilities—in short, the acknowledgment of the value of the study of economic and industrial history (Henry Ford to the contrary notwithstanding) all are indications of growing appreciation of the practical utility of definite past records to the business man. The consideration which is now being given planning departments and the emphasis which is laid on the development of manufacturing standards, the rapid increase in the use of sales estimates, are all evidence of the forward-looking tendency on the part of executives and the effort which they are making to forecast eventualities before they arrive.

Part of this tendency is due, no doubt, to the war, for it early became apparent both to those who were responsible for front line operations and those who were assisting them in the service of supply in the rear, that all possibility of success lay in planning and scheduling in advance down to minute details, and then in dispatching each movement according to the predetermined program. And of all the lessons learned in this connection, the most important of all was, perhaps, that no matter how carefully and intelligently details might be planned and scheduled by themselves, success would not be won if the various units were not bound together by adequate means of liaison. These principles whose truth was so thoroughly established on the battlefield are none the less true when applied to the everyday tasks of our everyday business world.

I

As we turn our attention to manufacturing with these ideas in mind it will be noticed that in planning for the future there are two factors which are

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the controlling elements in the operation of a manufacturing plant, for goods must be sold as well as produced if the business is to be successful and is to return profits to the owners. In some cases, it is true, one of these factors completely outweighs the other. The problem before a certain well-known firm of manufacturing perfumers is almost entirely found in the sale of its product. Less than 10 per cent of the selling price is represented by the cost of production, the other 90 per cent being taken for selling expenses and profits—and judging from the market quotations of its stock on the exchange, most of that 90 per cent is absorbed by selling costs. In a rough way this represents the distribution of the company's problems. Another concern doing a total business of $3,000,000 a year before the present depression set in had a selling staff of three thousand and a factory force of a thousand. These figures give only a rough approximation of the relative attention given by the executive officers of these companies to the selling and production problems respectively, and are presented only to make clear by contrast the fact that in most cases, the problem of a manufacturing concern is divided in no such fashion. Both selling and manufacturing must receive painstaking and careful attention.

II

During the past few years we have seen much time devoted to the solution of these two problems. Industrial engineers have developed the control of production to a very high degree of perfection as compared with a generation ago. Sales experts have carried on market surveys, sales analyses, advertising campaigns, and can now regulate sales to an extent undreamed of by our fathers. What has not been done in general, however, is to bring these two phases of a business together and so to co-ordinate them with each other and with the other elements of a business as to regularize its operation as a whole, in other words, to establish adequate liaison. All too often we find that the whole business is made subservient to the sales policy and the factory is kept constantly upset to suit the changing forms which that policy takes. Only a little less frequently it may be noted that the production side of the business dominates the situation and little regard is had for the needs and demands of the market. In other cases, the financial side of the business exerts an all-powerful influence and both sales and production fluctuate to suit its whims. Very often, of course, these results are caused by the individual personalities at the head of these several functions or by the kind of training which the general manager has had before he attained this position, a position which should make him an arbiter in spirit as well as in fact. Often, too, the general condition of the moment exercises control over the concern, and it is purely a question of what can be done and not what it would be desirable to do. Frequently, however, it is due to a lack of means for co-ordinating sales and production.

That more thought is being given to this subject is evident from the attention directed to the topic of budgets of estimates which represents one phase of the question. Budgets, in the normal use of that word, do not cover the whole field or meet all the various necessities of the situation. In the first place, they are usually expressed in dollars and cents and, while a financial measurement of production and sales is frequently very helpful and is sometimes the only one available, very often the co-ordination of the prin-

cipal factors can be more satisfactorily effected in some other terms. In the second place, the time element is dealt with in "overall" terms, budgets usually being prepared for a year, six months, three months, or some other such period of time, but no indication is given as to the time within that period when the budget is going to reach the peak of its accomplishment. This is really of fundamental importance, too, from the purely financial point of view, for any treasurer would say that he is vitally concerned with the dates when payments must be made or receipts be counted on as well as with the total expenditures and income and the time within which they may be expected. This matter of dates, however, is of particular importance from the point of view of the men in charge of production and of sales. Those who are developing budget methods of control are performing an important task and are helping to solve the big problem, but another step needs to be taken beyond that represented by budgets.

Perhaps this additional step may be most easily indicated by the word "schedule" for it brings to mind the conception of definite dates as well as of definite quantities and amounts. To this word "schedule" the word "master" may well be prefixed to indicate that the basic schedule is the master or controlling schedule on which the others are to be built up. Fundamentally, therefore, the "master schedule" is the co-ordination of sales possibilities and productive capacity of a concern, a balancing of these two elements on which the operation of a manufacturing company should be primarily based. This master schedule should be the means by which the operation of the various functions of a business may be adjusted, and the control of the work accomplished.

4

III

In order to lay out a master schedule for a manufacturing company it is necessary to know two things in particular. In the first place it is essential to have definite information in regard to the productive capacity of the factory. This data should be as accurate as it is possible to have it under the circumstances, for it must be remembered that varying conditions will permit only varying degrees of accuracy. A company turning out news print paper as its sole product can measure its plant capacity to within very close limits. If it has been properly equipped, the machinery will be so balanced that there will be no "bottleneck" places to check the flow of production. Slight variations will, of course, appear unless equipment is entirely made to order, but in general the proportioning of the various machines, tanks, digesters, etc., will be such as to permit a constant and continuous flow of production when it is once started.

On the other hand, a company doing jobbing work to order, such as a concern making special tools and machines to the customer's specifications is in no such favorable situation in this respect. However, it should know the capacity in hours of work for all the machinery in its plant and from its files of manufacturing standards built up on unit time-studies, it should be in a position to know fairly definitely how long it should take to perform various kinds of tasks on the different machines. We have in this kind of work a very good example of the desirability of making unit time-studies as a basis for control of production. With unit time standards at hand it is possible to know within certain fairly narrow limits the amount of time needed for any kind of work that can be done on a particular machine and can use this

information in making up the master schedule and in working out the detailed plans and schedules for the several orders as they come to the plant. The data which are needed for the preparation of a master schedule in this kind of factory are the number of hours of machine capacity which exist for each kind of production center.

There is the third type of manufacturing concern whose work is of the intermittent type, where the standards for the manufacturing processes may be set with considerable accuracy but where a variety of product is to be turned out on the same machines. In some respects this case partakes of the elements of both the others.

IV

When we turn to the sales side of the question, it will be found that there is a wide variety of information which will be required to establish the sales possibilities. In the first place, the past sales of the company must be studied in order to see when and under what conditions the sales have taken place. This information should shed considerable light on the future possibilities, particularly when the business is of the seasonal type with violent fluctuations from time to time depending on the time of year. The solution of the problem of seasonal goods is to a large extent a selling problem and the first step in dealing with it through the medium of the selling function of the business is by analyzing past sales. Space does not permit here a discussion of that very interesting problem, so the reader who wishes to follow it up is referred to an article by the writer, on "Solving the Problem of Seasonal Goods."[2] Information in regard to seasonal fluctuations and the extent to which they can be controlled is a vital factor in the working out of a master schedule, for, as it was pointed out above, the time goods are to be sold, especially if their periods of high peaks influence very materially the plans for production.

The next question which must be answered is in regard to probable future economic conditions. At this moment when business is dull and the atmosphere in general is pessimistic, the probable future is radically different from what it was in the fall of 1919, or the spring of 1920. For some lines of business the future looks rather black and the normal forecast of the executives in these lines of production is to expect few sales and to be obliged to work hard for those few. In other industries, the low point seems to be passed and the managers are anticipating increased business in the near future. This is not the place to discuss business cycles nor the immediate business outlook and it will be sufficient to call the attention of the reader to these well-known facts and to indicate that they have an important bearing on the question before us. If sales prospects are poor because of general business conditions, the situation should be faced and realized. However much executives wish to take an optimistic point of view and to encourage their employees to increased efforts, they can do themselves no greater harm than to bury their heads in the sand like an ostrich and refuse to see what is evident to anyone who looks intelligently into the situation.

A third point which must not be forgotten at this time is the attention which must be given in planning sales to the general policies of the company. If the policy is to expand into new fields hitherto not tried the probable sales must be estimated with great foresight and only after careful investigation. If new goods of a different

[2] See *Administration* for October, 1921, p. 473.

sort from those heretofore sold are placed on the market especial care must be exercised in judging their probable distribution. Of course, the company policy will affect the production side of the business also, but it will do so to a large degree through its influence on sales.

V

So far only sales and production have been considered and yet it is perfectly evident that they are only two—albeit the most important—of the factors which enter into the operation of a manufacturing business and which need to be co-ordinated if the whole is to operate smoothly. Finances, purchasing, labor, expenses must all be based on the same fundamental plans if the liaison between them is to be satisfactory. No business can operate without these other elements and they must find their place in the program which we called a master schedule.

In the first place, finances are bound to have an important position in this whole question. If the scheduled sales and production cannot be financed then a new schedule must be planned for them. On the other hand, it is perfectly evident that no financing plans can be laid till the proposed sales and output are at least tentatively arranged for. The total needs of money for the purchase of materials, the payment of labor and the satisfaction of expenses cannot be visualized until the production program is arranged. Neither can the total receipts for the period be estimated till the sales prospects have been carefully analyzed. It should be evident at this point that in addition to knowing the total expenditures and receipts, it is necessary for the financial department to have some idea as to when receipts and disbursements are to be expected. It might be possible to finance a given total under one set of conditions and be quite impossible to handle the same amount under another. If the expected sales are to be bunched at the end of the period, far greater calls will be made on the treasurer in order to build up a stock of goods during the period to meet the demand at the end than would be the case when the sales and production parallel each other. A concern that might readily finance the latter need might very possibly find itself unable to cope with the former situation.

If the purchase of material is considered, a somewhat similar situation will be found. A purchasing budget is a very great help to wise and economic buying of materials. In many instances, however, it will be necessary in general terms to know quantities in advance of the receipt of the purchase requisition from the planning department. Of vital importance to the purchasing agent, of course, is the time when the material is going to be needed for his plans, for purchasing will be greatly modified thereby. If an immediate need must be supplied, delivery and service to the factory must be the prime object, while if more time is available the question of price may receive more consideration with resulting benefit to the company.

VI

The control of labor in turn is dependent in a large measure on the master schedule. In many lines of work it is necessary to have a labor supply on hand and trained before the work can begin. The total number of workers needed during a certain period is not sufficient information on which to base labor plans, the time when they will be needed is just as important as the number. Not infrequently it

will be found possible to schedule the overhauling and repair of equipment for the periods which are indicated as slack on the master schedule and so enable the concern to hold capable employees at a time when otherwise it might be necessary to let them go to the evident detriment of the organization. The possibility of shifting workers from one kind of work to another depends on knowing beforehand what changes may be desirable. It also, of course, depends upon the ability of the worker to perform the different operations involved. One company has gone so far in developing this possibility of shifting of workers as to raise the base rates of pay for all those who can perform more than one kind of operation.

VII

While expenses do not ordinarily vary directly with the amount of output and may even vary inversely because of the carrying out of extensive repairs during a dull season, the effect of varying production will inevitably be felt in the expense accounts. The information which the master schedule and subordinate maintenance schedules furnish provides a means of controlling and evaluating the expense accounts which cannot be obtained in any other way. Expenses should not be considered a waste if they are being wisely made and are bringing in a commensurate return. Much has been said and written recently about budgeting expenses and this indicates a very progressive movement. It must always be borne in mind, however, that a record of the past is not the sole basis for estimating expenses in the future, but that the future plans for the business must also be considered. The logical source of information about plans which affect expenses is, of course, the master schedule.

The schedule of expenses has a reaction on one of the other factors already discussed—finances—and this serves to point out and emphasize one important detail which should never be forgotten: The master schedule in all its branches is a whole and not simply a collection of parts. Over and over again it will be found that one schedule cannot be worked out till some information is obtained from some other schedule. It helps to make clear that the problems of a business are a whole divided frequently into parts for convenience rather than a collection of heterogeneous units built up into the semblance of a whole.

VIII

Since the working out of a master schedule is dependent in a large degree on the individual peculiarities of the business, it is not possible to do more than to give some general indications of how it is to be worked out in practice. In the first place the manager of each principal division of the business should work out a tentative schedule. Of course, the labor can be performed by an assistant but the manager should personally guide each step as well as be responsible for it when it is done. There is more than a theoretical reason for this, because before these tentative schedules take permanent form, it will be necessary to have a series of conferences presided over by the general manager to adjust any divergences between the schedules, and no manager will be in a position to expound and defend his schedule if he is not familiar with the details of their construction.

The first step, therefore, is for the sales manager to prepare a sales schedule in as much detail as may be needed in so far as lines of product and probable periods of sale are concerned based on past sales, future prospects, and company policies. At

the same time, the factory manager should prepare a schedule of plant capacity, a task that should be relatively easy when there are adequate manufacturing standards at hand. The next step is to obtain a tentative adjustment between them to serve as a basis for the preparation of an expense schedule by the cost accountant, a material schedule by the purchasing agent, a labor schedule by the employment manager in collaboration with the factory manager, and finally of a financial schedule by the treasurer. When all these schedules and any others which may be needed are prepared on a tentative basis, then should come the conference referred to above at which the permanent master schedule in all its various branches is worked out. It should not be imagined that there will be more than relative permanence for this or any other schedule. This schedule like all others is a guide to the future and when the future approaches the present it may be wise to modify the plans prepared for it.

IX

Lastly comes the problem of working out the details of the several branches of the schedule. This can ordinarily be left to each manager who frequently deputizes it to his assistants. The production schedule is usually turned over to the planning department whose chief occupation is working out the details of that schedule fitting each order into its place as it arrives, and dispatching its various operations through the factory in order that the schedule laid out may be realized as far as possible.

The benefits which result in part, and often in large measure, from the use of a master schedule are many. Selling promises kept and hence satisfied customers are one of the outstanding results; the reduction if not the complete elimination of both idle time for men and machines and overtime for both; purchases made at such time as to realize the most for the money expended and made so far in advance that supplies are not constantly rushed to meet deliveries; better relations with the banks promoted, for they can be warned in advance of probable needs and hence can prepare to meet them and notes paid off when due, a very much neglected financial courtesy during recent years. In fact, the foresight expressed in the form of a master schedule cannot help but result in much better control of the business, more contented employees, and larger profits.

THE TRADE ASSOCIATION EXECUTIVE IN MODERN BUSINESS

BY ERNEST F. DUBRUL*

JUST before the "Big Slump" some men tried to tell the overoptimistic what was impending. But these conservatives were called croakers, killjoys, pessimists, and a lot of other names. Then the Big Slump came, and the so-called croakers, killjoys, and pessimists were accused of having caused it by talking about it. By that same logical process, the weather man who from observation of weather reports warns the country of approaching storms, must himself cause the storm.

Many of those who failed to heed the warnings of the coming slump have been excusing their own folly and consoling themselves and deceiving their stockholders with statements to the effect that "Fate struck us a blow that nobody could have foreseen." It was ever thus and it always will be thus. Most men believe what they want to believe and always alibi themselves. The causes of business cycles are ignorance and folly, indifference and caprice. Until these human weaknesses are eliminated by the perfection of human nature in the millennium, we will continue in the future as in the past to have these cycles of boom and depression.

As always, when the boom is at its highest and just ready to break over, the shallow optimist will labor under:

Cyclical Delusion No. 1:

> The country is set for wonderful prosperity, world without end, Amen. Costs are high, therefore prices are high. Nothing will ever be cheap again. Buy now before prices go higher.

Again as always, when the slump has been on so long that things simply have to improve, and when the thinker has turned optimist, the shallow-minded will have turned pessimist and suffer from:

Cyclical Delusion No. 2:

> The productive capacity of the world was so greatly overexpanded in that last boom that human wants can never catch up. We are in for a definite and permanent era of low prices. Nothing can happen to permit prices to ever rise again. We shall never again see another boom.

Just now, business men are looking back over their mistakes and swearing never to be caught again. But as soon as the clouds roll by, most of them will travel the same primrose path. Again we shall hear them say "That last depression was abnormal. It was the reflex of the war, it can't happen again. See how prosperous the country is, etc., etc." They always do, and always will, because they are just human beings.

We have these cycles as already intimated, because human nature is so human. A lot of optimists have already forgotten the lessons of 1920 and are dreaming that a normal business is one that exactly corresponds to the maximum capacity production of their plant, without any difficulty in getting orders, or materials, labor, fuel, transportation, equipment, or capital, and in some cases with even the weather made to their command. By 1907 a lot of men had forgotten the severe lessons of 1893 to 1896—only a few years before—and the milder lesson of 1903. By 1920 few had any remem-

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brance of 1908 and 1909, and by 1928 a new crop of optimists will have ripened; so there will again be work for another lot of croakers and killjoys about that time—perhaps even before then because the cycles seem to be running shorter. There will be not only work, but good opportunities to profit by the mistakes of the over-sanguine, as has been the case fourteen times in the last hundred years; or about once in seven years.

II

How does the trade association executive fit into this mosaic? It is trite to say that the main object of every trade association is to better the business conditions of its industry. If conditions were perfect there would be no need of associations to better them.

It does not take exhaustive study to convince one that cyclical fluctuations have been the cause of any industry's greatest losses. This being true, can a trade association executive be of any service in the reductions or avoidance of this loss? There is no better proof that he can than the statement of an association president, who is also the main owner and manager of the leading concern in his particular specialty, though this concern is by no means the largest in the whole general industry. This man, in a semiannual review of his association's work along the line of statistics and cycle study says:

> Industries that had the best association service proved that by coming through 1921 in the best condition. Had we been doing in 1919 the sort of work we are now doing in the Association, my own company would have saved several times the total amount spent by all of you on the Association. I feel that we can never again risk going it blind, and I know that others feel the same way.

In his analysis of the operation of economic forces the economist has to conceive a perfect market and perfect economic men on both sides of it, as buyers and sellers. In this perfect market every seller would have access to every buyer and both buyers and sellers would be fully informed as to costs of production, and the state of supply and demand. In this perfect market, supply would be closely adjusted to demand at all times, and perfect competition would make for prices that would be perfectly fair to all buyers and sellers alike.

Business being a human activity, operated by human beings, motivated by human wills, with the necessary and unavoidable limitations of humanity, will always be less than perfect. Human frailty leads some men to use force and fraud and to attempt artificial monopolies to gain their ends. Human limitations prevent us from getting a perfect knowledge of the state of supply and demand of any commodity. Indifference and human folly likewise prevent perfection. Favoritism often interferes with perfect competition, and finally human caprice and desire builds up demands almost over night that are supplied by entirely new industries, like the radiophone. By the same caprice industries that made money for a time have been destroyed over night, like the production of bustles, hoop skirts, etc.

Human nature being what it is, business must always be "chancey" and risky. Even though the social control should eventually be able to eliminate force, fraud, and monopoly, we shall always suffer more or less from the limitations of personal favoritism, ignorance, folly, and indifference that will keep the market from being perfect.

The trade association, by gathering statistics of supply, demand, and costs, by educating men to use the statistics,

by convincing them of the desirability of using more economics, and by raising ethical standards to a higher plane, will do all that is humanly possible to make a more perfect market, thereby working out competition of the type more closely approximating the economist's perfect market.

III

The elimination of business imperfections of all kinds can only be secured through better business education. Professor Ely, in a stimulating article entitled, "The Price of Progress"[1] shows how every generation has been advancing over preceding generations in economic well-being. He also shows how the business of every new generation requires a better man, better in mind and soul, a more highly educated man, to successfully conduct it, than did the business of the generations that went before. Progress lays that price of education on humanity.

Education in the fundamental theory of business is being given to the growing generation of business men in various colleges and university schools of business administration. But where is that new generation to get its education in the application of the theory? Just where the previous generations got theirs, in the University of Hard Knocks, which most business men entered by the back door, and where most of them have never had a coordinated well-planned course of instruction.

When an industry has been buffeted about hard enough to realize the defects of that kind of education it begins to look about for something more systematic. It forms a trade association, which is the graduate school in this University of Hard Knocks. In that school every attendant should be an instructor, each contributing what he can to the common general fund of knowledge, and studying the contributions of his fellow instructor students.

Wonderful possibilities of development lie in these graduate schools for managers. Look at the faculty on which the student members can draw for information. Any trade association worthy of the name contains the intellectual leaders of the industry. Not necessarily do we always find the managers of the largest plants, because this educational movement is in its infancy and sometimes the manager of the largest concern is still of the older school with its limited vision, but it will have the most active and progressive men of the industry—the real leaders.

No single university has such a potential faculty as the trade association. All the universities together could not number as many expert technicians in a given line as a good trade association can gather together from its own ranks. Let these men join in technical research, for instance, and wonderfully productive results must follow, as many associations can certify. Get the accountants of an industry together to study that industry's cost problems, and more practical results follow than tons of printed papers will produce. Get the salesmen of an industry together to study that industry's sales problems, and you have beaten any salesmanship course; for no school course can deal with other than general theoretical principles, and its students are without practical experience with which to tie these up.

Get the real bosses of an industry together to study the actual business problems, the economics of that industry, and you will do more to improve that business than all the college professors can do by lecturing to immature, inexperienced boys. Business is ap-

[1] *Administration*, June 1922, page 657.

plied economics, and the boss of a business is living and breathing applied economics every day. Get this sort of faculty to teaching each other, and training the junior executives under them to be the better men of the next generation, and no human mind can conceive the limits of progress.

IV

To get this teaching corps—this faculty of the trade association—going along lines of systematic progress is the real job of the association executive of the future. Call him what you will, he will really be the Dean of the Faculty of the Graduate School in this University of Hard Knocks.

Suppose now that this Dean of the Faculty makes a survey of his own job to find which of his school's functions need the most attention and development. He finds the activities of his industry divided into three main divisions—Production, Distribution, and Administration. Is one of these more important than the other? Which of these has had the least attention from his faculty? He can go through the books and papers and find an immense literature on technical subjects that have been studied for many years by distinguished scientists. He finds much less, though still a considerable amount, on sales. Several good magazines and many books and articles deal with sales questions. But on administration and finance he finds little—a few books only, all general in scope, and but few articles scattered through magazines of various sorts. He finds some articles in economic journals written for and by professors of that science, but very few articles set out the findings of economic science in language that the business man, the practitioner of economics, understands. All this shows the Dean that probably the administration section of his industry's school course has been neglected.

Looking about he finds that his industry has had many failures. New concerns start each year, but not all survive. They fail to earn the profit which is the objective of business, and its very life-blood. Study of the causes of these failures discloses which of the three departments is most often responsible for failures. Was it the production department? Hardly, because many of the concerns that failed were dominated by excellent production men, and good production methods are very well known. Is it in distribution? Again not so. Failures are greatest in number and liabilities after a period of the greatest activity in distribution, and concerns with the largest losses often had wonderful salesmen at their head. Again we are brought to the neglected element, the administration or financial element that carries the final responsibility and risk. That element owns and controls; it gets the profit or stands the loss. It has the final authority and dictates the policy of the business. This element employs, as well as directs the production and sale of the industry's product. It is the one to say "Go" or "Stop". As administration is wise or unwise, the individual concern, the whole industry, and business in general will prosper or decline. With the administration section, the Dean of the Faculty has his biggest work, the best instructors and the worst students.

As to the work to be done, look at the wreckage of surplus profits caused by ignorance and folly and indifference in high places. Watches, automobiles, tires, sugar, leather, banks—and how many more were there in which stockholders paid heavy penalties, because the men who administered those businesses did not know, and in some cases

did not care to know as much about their jobs as conditions made it necessary that they should know. The work to be done is to see that less of this sort of thing happens in the future.

V

Now as to the faculty. Not every man in those industries made fatal mistakes. Among those who knew better will be found the faculty, the body of teachers who can and will teach, if the others will only learn. Those men will be glad to teach because they know that industry is one complex whole, that when many of their neighbors go wrong their own businesses cannot be as healthy as they would be if all were doing the right thing under the conditions. From enlightened selfishness alone these men can be enlisted in the work—so there's no trouble about recruiting the faculty for our graduate school of applied economics.

Now what about the student body? Aye, there's the rub. Some we shall get, willing and anxious to learn how to avoid making the same mistakes again. Others have too much self-pity to give any place to self-blame. Some always want to "pass the buck," to blame anything and anyone but themselves for conditions they create and intensify. Some think the Golden Rule a fine thing, but for the other fellow, not for themselves. Some of the older school still dream of fight and warfare as a proper state of business, and look on the co-operative study of evils as all "bosh." To reach the headship of their own concerns men must be of powerful individuality, and co-operation with others has not the strongest appeal to such. They do not care to give information as to their own successful methods, even to get in exchange similar information of value from their competitors. But under the complex business conditions of this day and generation, no man can have learned all there is to know if he has only his own experience from which to learn. Those who combine their experience with that of others become the better men of their generation. In time their efficiency will tell, and the self-satisfied will put themselves out of the running by repeating mistakes that the better informed have learned how to avoid. So broad vision and willingness to teach and learn has a money reward.

VI

Let us now consider the curriculum of our graduate school. Our most important subject is the business cycle, for in that cycle's fluctuations lie the manager's greatest opportunity for gain and his greatest chance of loss. It is as necessary in some stages of a cycle to know how to avoid loss as it is in other stages to know how to make gains. The captain of a ship must know the science of navigation and how to apply it, and how to handle his ship in storm and calm. He must learn the tides and bars. Shakespeare knew that the business tides existed, for he made Brutus say:

> There is a tide in the affairs of men
> Which taken at the flood, leads on to fortune;
> Omitted, all the voyage of their life
> Is bound in shallows and in miseries.

So our class of business captains must learn what mariners learned long ago: To observe the tides; to record their rise and fall at every harbor; to know the depth to which to load or not load if they would safely cross a given bar on a given date; to learn to predict the tide by first learning its causes.

Weather observations came later, and in a few more centuries we may perhaps be able to predict the weather

with certainty some months in advance. Study of weather statistics, by comparison and correlation, seems now to disclose cycles of rainfall and their influence on crop yields. Further study will not only reveal the causes of the rainfall cycles, but will tell the farmer why to plant some things in some years and not in others.

Crop yields affect business by affecting the purchasing power of the agricultural elements of the world's population. Some day we may puzzle out the lag of one behind the other, and may be able to warn the business world well in advance, of a general fall in farmers' purchasing power, due to prospective crop conditions as affected by rainfall cycles. It is all a matter of careful, painstaking research. We may or may not be able to get statistical proof that will be certain enough to rely upon. If business would definitely and liberally endow a corps of research students to puzzle out some of these things that bear one on the other it would save millions of profits that are gained in booms only to be lost in depressions.

VII

The study of cycles is advanced work in economics, and unfortunately our students will not, for another generation, come to us with even an elementary knowledge of that science. They are now practicing economics as an art, but without any knowledge of its underlying theory, just as a quarry workman practices physics with his crow bar without knowing the laws he applies.

Many men say, parrot like, "Price depends on supply and demand," and think they have expressed the wisdom of Solomon. Our Dean's task is to get his students to see how the law of price works out. To do that we must get them to contribute statistics that will show the actual state of the market for their own commodity. To be able to measure their demand they must know at regular and frequent periods the physical amount of new orders and releases, cancellations and suspensions, and unfilled orders. To measure supply they must know shipments, production, and stock. Given these things they can establish the relationship of supply and demand existing at a given time, and draw curves that will predict the course of prices with uncanny assurance. With such curves the manager can guide his policy with intelligence instead of "by guess and by God." He can know better when to stock and when to liquidate. Knowing the trend of this demand he can follow it and adjust his supply to it promptly.

The manager's main losses heretofore have been due to overanticipation of demand because of faulty information that leads to overstocking, overbuilding, overborrowing, overbuying, and overselling—so stuffing and glutting a market that the glut is cleared only after a painful period of shut-down, and loss and misery for himself and his employees. Ignorance of supply conditions leads to a boom when actual consumption is being amply taken care of. Temporary shortages lead buyers to overorder and sellers to prepare to fill those dream orders that are cancelled when the actual demand is again supplied.

VIII

Hundreds of executive problems can be well solved only with facts on which to base decisions. Proper statistical presentation and proper charting enable the executive to decide these problems with safety and dispatch. Secretary Hoover has well said: "Deprive business of statistics and the country will be bankrupt in 10 years."

Statistics are vital to business, and therefore should form quite a part of the curriculum of our graduate school. Our students must learn what statistics should be gathered, and why. Learning why, will, of course, involve learning how to use them and developing the will to use them. Our students and faculties have wide fields to cultivate; fields rich in harvest, whose surfaces have only been scratched. Our course will also include a study of the nature of the demand and supply of each particular kind and grade of commodity, whether it is elastic or inelastic.

The student instructors will learn why Mr. Ford can greatly stimulate demand for cheap automobiles by small reductions in price, that would have no effect whatever on the demand for Rolls-Royce machines. They will also learn why Mr. Ford's policy would be ineffective for a machine tool builder who makes the machines to fabricate "flivvers." Our Dean will interest his student faculty in costs, so as to enable them to determine the point of their individual marginal disutility and nerve them to drop out of the market at that point, if some more efficient or more ignorant competitor makes a price below it.

In their education on the use of statistics showing the actual conditions of supply and demand, our students will first learn that falsifying the barometer does not change the weather. They will then report truthfully. They will also learn that, with their statistics to guide them, they need scarcely know their competitor's price; that they can tell whether their own price is too high or too low; that their price is always too low if they are not earning a profit when their management is as efficient as that of their competitors; that the course of their own volume measured against the total volume will tell them if their price is too low or too high. They will learn to make their own prices, and not worry about competition when shown how they are running compared to their competitors, and compared to the trend of the industry in its cyclical movement.

Without statistics of orders and cancellations, production and shipments, we can do none of this fundamental work. If our graduate class learns its lessons and uses its brains, our industry will know what to do and what not to do in every stage of its cycle. Our Dean's industry will know which other industries give signals of revival or decline in advance of its own cyclical movements. It will know how its demand correlates with demand for capital, and it will correlate and exchange its information with other industries that are related to it through interdependence either as buyers or sellers. Studying cycles will help to establish sound purchasing policies, sound credit policies, sound manufacturing policies, sound financial policies, sound construction policies.

IX

So much for our school, its faculty, students, and curriculum. Now for the Dean himself. Every industry really needs a Dean but not all of them know it yet, and not all of them are willing to pay him what his services are worth. The Dean's job requires a thorough training in abstract economic theory as a foundation. That training costs money, and those who expect to benefit by the training, must expect to make it worth the while of prospective Deans to take the time and spend the money necessary to get the training. But training only in economic theory is not nearly enough. It must be supplemented with sufficient practical

business experience to enable the embryo Dean to correlate his theory with the facts of actual business. Sometimes these facts are so mixed as to be very difficult to distinguish. It requires an analytical mind and concentration of thought; it requires that the Dean be given time to study and facilities to study; that he not be expected to do high-class professional work and at the same time to be burdened with details of office management.

However, chief clerks or office managers should attend to that, and must be provided if the Dean is to function properly at his real job of being Dean of the Faculty. This Dean's job requires just as good a brain and character as any high-class lawyer places at the disposal of his clientele. No man able to fill it should be expected to work for an office manager's salary. He is worth to the whole industry at least as much as a highly paid executive in the industry earns from his company.

To keep him on the job the industry will have to pay its Dean enough to keep him out of business. If he is not fit to run a business at a high salary he is not worth having as a Dean. Good business dictates that business executives be given opportunities to share in the profits of the concerns they administer. This opportunity must be denied the Dean of the industry's faculty. He must not have any personal interest in any member company. For that reason his salary should be liberal enough so that his savings, carefully invested, will balance the opportunity that executives have to invest in the concerns they guide. Naturally, his organization should be so well financed as to leave his mind absolutely free to study the industry's problems, without worry as to where his funds are to come from.

X

Does all this seem to be too fanciful a picture? Not if the industry knows what it ought to have and gets the right Dean on its job. All industries do not yet realize what a good Dean of their Faculty could do for them, and therefore the effective demand for them is still limited; but it is growing. On the other hand, the supply of such men is not equal to the small demand. Both supply and demand could increase to the benefit of all concerned. As time is required to produce Deans of the right kind it is safe to say that perhaps a generation or two will elapse before the dean market reaches the point of saturation.

The sources from which to supply the demand for deans are not plentiful. Few men are immediately available who have both theoretical and practical experience. There are college instructors with the training in theory, but their lack of business experience is a great handicap. Old business men do not believe young college professors can show them much about business, and in many cases they are right. On the other side, many experienced business men who would make good deans lack the background of wide study of economic theory that is necessary. Such men have too often slipped into economic errors, like considering a monopoly basis of industry as desirable, at least in modified form. They do not get down to fundamentals because they do not know the fundamentals. When it comes to cyclical interpretation, forecasting, etc., which requires long study, they are at a loss. Some busy executives of associations will have to find time to supplement their present qualifications by further study along economic lines. If they are to advance in this chosen profession as they should, that is

precisely the course they must pursue.

With only these limited sources of supply open, there are numerous demands that are not confined to associations. Large industries, banks, etc., now find that it pays to make use of trained economists in their own organizations. Not only that, but good men can build up private practices as independent consultants, just as engineers and lawyers do. It is a wonderful field, with only a very few workers in it. Heretofore, association executives have often looked good enough to be tempted to take employment with business concerns. The need of still better men will open similar and greater opportunities for the higher grade of executive of this Dean-of-the-Faculty type who is competent enough to act as consulting economist to a whole industry.

In the presentation of this subject the purposes in the author's mind are as follows:

1. To set out the needs as he sees them that each industry faces in this very day, for high-grade economic service to be rendered through its association.

2. To show that to get such service, industries must expect to pay what professional service of equal grade returns to other high-grade professional men in law, engineering, accounting, tax work, architecture, etc.

3. To indicate to those who will prepare themselves for the field, the sort of work that lies before them and the sort of preparation they themselves should have or obtain. to render the kind of service that modern conditions demand.

THE TECHNIQUE OF EMPLOYEE REPRESENTATION

BY WM. LEAVITT STODDARD*

THE title of this article is too ambitious. That there is a technique of employee representation, or that such a technique is in the course of development, few can deny. But to define it with anything like the precision which is possible in defining, for example, the various methods of computing labor turnover or managing an employment department, is at the present time impossible. It is a curious commentary on our national lack of interest in industrial facts that we have not kept exact track of the experiments with employee representation now and for the last three years in process in this country. It is safe to say that no public, semipublic, or private agency really knows how many firms have employee representation at the present moment, and much less how they are working and what the general trend is. The National Industrial Conference Board in its recent research report, brought us reasonably well up to date, but vast holes in knowledge remain to be filled.

So to write of technique with anything like scientific thoroughness is difficult. Yet there has been developing a certain technique and, to judge by the available data, employee representation is now at last entering on the phase which will justify it in the minds of any but the most obdurate protestor against innovation.

Popularly speaking, employee representation has been run through a wide range of paces. It has been adopted by employers as a drowning man snatches at a straw. It has been taken up because it was the fashion or because an industrial relations expert indorsed it. It has been entered upon in a religious fervor for extending democracy into industry. It has been established in order to fend off trade unionism. It has been installed by governmental fiat. It has been introduced frankly as an experiment with the hope that it would pay. It has become an item in a policy of benevolent welfare. It has been fitted into management in the profound belief that here at last was a plan which organized one of the most difficult of human and business relationships, the relationship between employer and employee in a modern large-scale industrial establishment.

We may learn something by looking back to origins. It is a relatively safe statement that in the majority of places where employee representation was installed prior to the time when it became a subject of magazine articles, books, and conferences, it sprang from the conviction on the part of management that trade unionism offered no ultimate solution of the problems of day-to-day industrial relations and that in some way, wholly aside from the intricate issues arising from trade unionism, there must be discovered a means of co-ordinating two most essential factors in production.

II

The National War Labor Board was not solely responsible for imposing employee representation on American manufacturers, but it was prominent among the governmental agencies fostering employee representation during

* Administrator, National War Labor Board, 1918–1919.

the war. So far as it is possible to trace motives and causes in a federal institution, it is true that the National War Labor Board decreed employee representation for the reason that it offered a means of collective dealing which maintained the *status quo* as regards union recognition or otherwise; that is to say, the Board, convinced of the desirability of collective dealing, hit on employee representation as a device which would promote this end without playing either into the hands of the trade unions or of anti-union employers. An investigation made shortly after the armistice by the National Industrial Conference Board tends to justify the judgment of the War Labor Board. Many of the War Labor Board plans of representation were abandoned as soon as the war was over. They had served their obvious, temporary purpose, namely, to secure collective dealing *pro tempore* and in no wise to alter the pre-war relations of men and management.

The idea, however, caught on and grew to its present formidable proportions. Incidentally it is worth recording at this point that at one time the consulting staff of the War Labor Board formulated, only to reject as too advanced, a plan for the installation of *production committees* of men and management. Thus early was the present trend foreshadowed.

If the first phase of employee representation is to be described as the pioneering, exploring period, the second phase, coming shortly thereafter, was the time when the forms, rules, and regulations were being evolved. There was not even an accepted uniform name for employee representation; it was called "shop committee systems," the "works council" movement, "industrial democracy," "employees' representation," and the like. The technique of the machinery of employee representation, how to hold elections, how to form committees, the length of terms of service, and so on, were the order of the day, rather than the larger ends of usefulness. To illustrate, there was a nice academic controversy whether it was fairer for each side of a joint committee to vote as a unit or for each individual to vote separately, the majority of the entire committee deciding an issue. There was then as now much discussion as to the amount of actual control or say that the employees should have.

During this period arose two schools of employee representation, differing on a vital principle. Curiously enough, the least democratic and most inefficient of the rival types developed by these schools went by the name of industrial democracy; and the most democratic and effective, by names less attractive. It is worth while to examine these two types, now, apparently, tending to merge into one.

Broadly speaking, the two prevalent types are the joint committee type and the "John Leitch" type, commonly so-called after its energetic promotor. The Leitch type is based on the theory that the political expression of democracy seen in the United States government can be transplanted with little change into industry. The employees elect the House; the foremen the Senate; the manager and his staff are the cabinet. There are obvious holes in the analogy with our federal system. For example, the same voters elect members of the House of Representatives and members of the United States Senate, while foremen are appointees of the management. Again, the people of this country choose their president; Leitch fails to sovietize industry by extending the parallel literally. But the chief fault in the system is not in the imperfect similarity with our national government; it lies in the con-

tinued separation of employees and management.

It has been flippantly said that a John Leitch system is all right as long as John Leitch is within call to straighten out tangles. This is an exaggeration, of course, but there is a grain of truth in it. If it be the purpose of employee representation to organize the day-to-day relations between the workers and the "bosses," the Leitch system fails because it organizes *each separately* in a very attractive and beguiling elaboration with all the parliamentary paraphernalia thrown in. I have personally been in at the doctoring of two "industrial democracies;" one in a Canadian plant, and one in a group of American mills.

It so happened that the central difficulty in both was that the two partners were attempting to do business at arms' length. The house functioned alone; the senate alone; the cabinet alone. Occasionally standing joint committees of the two houses met. But there was no intimate contact between the top and the bottom. There was an interesting and at times exciting political game, intensified by the savings-sharing plan which sometimes worked badly and sometimes very well. In both the cases referred to, the cure was simple—insinuate into the governmental system the theory and later the practice of joint committees with the responsibility of settling something, no matter what, under their own steam at their regular sessions.

Having accomplished this, the two debating societies might or might not survive. It made little difference as long as the essential point was gained of having men and management hitched up together, feet under a common table, realizing that personal contact the loss of which is perhaps the biggest single defect in the human end of modern industry.

III

Two years ago it was possible to define, more or less, important differences in employee representation of the joint type. With the passage of time these differences have been smoothed out and are seen to matter little. That which differentiates one joint type system from another is not so much structure as it is the spirit or purpose that is behind. Between the joint type and the "industrial democracy" type there is a natural gap. This gap is breaking down as "industrial democracies" re-form and fall into the shape which permits fulfillment of the real aims of employee representation.

Just what these aims are it is worth while stating at this point. Permit me to quote the admirable definition of purpose by the National Association of Corporation Schools:

1. To restore, at least in part, the closer contact between employers and employees which existed in the earlier days of industry.
2. To furnish a means by which employees can present grievances as they arise, before they assume serious proportions.
3. To give employees a voice in determining the conditions under which they shall work.
4. To afford a channel through which disputes, which might otherwise cause serious industrial troubles, may be adjusted amicably.
5. To create such an atmosphere that trade disputes will never be carried to the breaking point.
6. To pool schemes and suggestions for the better conduct of industry.
7. To enable individuals to present grievances for the better control of industry.
8. To enhance the importance of the human element in the operation of industry.
9. To make foremen less objectionable as taskmasters who owe their preferment to their success in getting as much as they can out of the men at the least expense to the company.

10. To give employers and employees a better mutual understanding.

11. To avoid discontinuance of production and to maintain maximum production necessary to mutual interest.

12. To provide regular facilities for access by employees' representatives to the management and for consultation by the management with representatives of the company.

13. To give the employees an opportunity to discuss the conditions under which they operate and a means of adjustment through chosen representatives.

14. To enable employees to increase their earnings by increasing their knowledge of industrial processes and their interest in the work in which they are engaged.

15. To further the common interests of the employers and management in all matters pertaining to plant organization, efficiency, and general working conditions.

A striking fact in the whole situation —a fact often lost sight of—is that in the United States the motive power for employee representation has come from the side of the employers and the engineering consultants of industry. Growth has been no doubt stimulated by the antitrade union sentiment developed since the war, but the solid body of thinking that is back of employee representation is as purely technical and disinterested as could be found. It may or may not be more than a coincidence that employee representation had made good just prior to the launching of the open shop movement, but the truth is that no more efficient device to maintain the honest open shop has been conceived than employee representation. The relation of this to the broader but more detailed questions of technique will appear later.

Paralleling the rise of employee representation in unorganized (nontrade union) industrial plants, has come the intensive organization of the employer-employee relationship in the needle trades; beginning as crude mechanisms for the adjustment of disputes; finding their place as more highly cultured mechanisms for better shop dealing; and now, to all appearances, becoming, as in Cleveland particularly, essential to the solution of problems of production.

IV

Employee representation has, we have seen, passed through two phases. It is now entering upon its third and possibly its final phase—that in which its technique will be most completely developed. If we divide management into preparation, organization, and direction, and if we consider employee representation not primarily as a type of organization or as a form of control, but as an *engineering device*, designed to assist in preparing each worker for his task, then employee representation is and must remain prominent in the program of management, a part, indeed, of the technique of management.

The most elementary considerations require that working relations shall be as frictionless as possible, that disputes over wages and working conditions shall be adjustable within the unit of the plant, and, after this, that the way shall be open for joint planning of production. These ends employee representation accomplishes if it accomplishes anything at all. But the task of the worker and of management is not principally to secure and maintain industrial peace. It is, rather, to secure and maintain increasingly high standards of production, to eliminate waste, to labor together for the upbuilding of a new technique of manufacture which shall be adjusted to and take advantage of the advances in knowledge in the arts of management and production.

Let us get down to specific cases.

For 15 years the Blank Manufacturing Company has been known as an establishment where systematic planning, time study centralized employment, interdepartmental transfers, and the like, have been coupled with systematic and far-sighted treatment of the working force. There have been no labor troubles. Turnover is low; employees are well paid; working conditions are above the ordinary.

Some two years ago a system of employee representation, devised almost wholly by the workers, was set up. Unlike many plans, this one had little or no friction to eliminate, or stored-up grievances to handle. It could set itself at once to the task of dealing with production, to the task, first, of letting the employees educate themselves in phases of management which hitherto, because of the lack of the right mechanism, had been closed books. The results to date are not measurable in terms of dollars and cents. They can perhaps best be summarized in the phrase of one of the firm:

"'Employee representation,' is selling scientific management to our people."

V

Another case of the same kind, again withholding the name of the concern, has to do with a large metal trades plant where, in the space of less than three years, employee representation has revolutionized relations, formerly about as hair-trigger as could be imagined, has prevented stoppages of work, and has brought satisfaction both in wage advances and reductions. A memorandum prepared by one of the employees for the writer describes tersely the new technique that is being developed in this plant:

To realize to its full extent, the relation of employee representation to production, it is necessary to view in retrospect and hold in mind some of the conditions of big industry in the summer of 1918 and before.

It is certain that with insufficient wages, unfair prices, and petty tyrannies, on the one hand, and on the other retarded production, negligence, distrust, disloyalty, and frequent labor turnover, higher wages alone did not provide the remedy, so that as long as old arbitrary methods remained unchanged, and waste evils were ignored, the endless discussions between employee and employer terminated with mutual misunderstanding and, in many instances, with severed relations.

So it was recognized by economists and by management in general that some means must be had to open the pathway to harmony, confidence, and co-operation—some means to provide both parties with facts. Industrial education must eliminate class warfare, and the right of human expression, so long denied, be recognized. The interests of the employee and employer in the successful and efficient conduct of the business in which they are engaged are found to be identical, and there only remains the necessity of finding the right vehicle—employee representation.

Our plan was put in practice at this critical period in 1918, and with no substantial change has continued to function with increasing efficiency to the present time, standing firmly on the basis of a square deal to all.

To be successful, the employee must have work, and his great concern is to get along well on his job. Likewise, to be successful, the employer must hire help and his great concern is to build an efficient organization. We think that the plan of representation has made better relations between the management and the workers, due to better understanding of each other's difficulties and viewpoints. The opportunities for closer understanding have, in themselves, made better relations. Speaking of the management, we include the foremen.

What is a fair wage, and what the content of a fair day's work, were, perhaps, the most vital subjects for dispute. These are many times left to some crude method of bargaining, where the solution is more a matter of erratic opinion than fact, or

merely the result of blustering intimidation. Therefore, immediately our plan of representation was adopted, we set out, through the general committee, to determine a sound and fair basis of wage. This committee drew up a scale of rates for hourly workers, and a list of basic rates for piece workers, consistent with the relative amount of skill and intelligence for the average man involved for the work in each group. The resulting arrangement was acceptable to all because, through the representatives of both company and employees, light was thrown into the remotest corners of the plant and the facts brought out.

The rates once established, disputes soon arose over the individual piece prices, employees contending that it was impossible to earn the basic rate agreed upon with the prices set on certain operations, and foremen contending that certain other prices allowed the basic rate to be earned too easily, which tended to laying down on the job and consequent loss of production. Here, again, the application of the plan was brought out and continues to the present to be a very satisfactory medium for obtaining justice for both sides.

Under the plan of representation the detailed time study has been formally recognized by the representatives and other employees as the only fair and just basis for the final settlement of differences of opinion in regard to piece-work prices.

First, however, let it be pointed out that we attempted nothing revolutionary and always endeavored to accomplish our purposes as far as possible with the means at hand.

We already had a piece-rate department and had practiced a system of price setting through time study. Nevertheless, the force was small and the field was large. Many of the prices, therefore, were the result of comparison with prices obtained from more or less unreliable sources. Many times the biased information of the foreman was accepted and lacked a consideration of all the conditions. Moreover, the time-study man was looked upon by the shop as an undesirable citizen. His position was very hard to fill and very little thought of by those who might be competent. He was the object of much abuse and there were few workmen who would admit that he possessed the least spark of justice or honesty. Consequently, the tendency was to try to fool him as often as possible by stalling. At times even the foreman, ignoring the fact that much of the spoiled work could be accounted for by lack of proper supervision on his own part, was more inclined to blame the prices and give the man his support in such an attitude. Furthermore, many employees believed it to be the general policy to compute the price at the rate which, in the opinion of the individual setting the price, was proper for the particular workman it involved. In this way, the prices were subject to all the vagaries and prejudices of human nature. Owing, also, to the uncertain status of the price setters, the final price was often but a poor complement, and the resulting inconsistency of the piece prices was apparent.

Our plan provides for the participation of representatives in the adjustment of individual piece prices. Here again, it proves to be the only successful medium for showing the facts to both sides. Now, whenever a price is questioned and a time study is to be made of the operation, the operative has the privilege of requesting the presence of his representative to see that he gets a square deal. In this way the tendency to deceive by stalling was overcome, for, when shown up to his own representative, the operative had no comeback. All suspicion that a biased judgment of the foreman was accepted, or that affecting conditions were overlooked, was allayed. The question, also, whether spoiled work was accountable to the price being low or to lack of proper supervision on the part of the foreman was easily settled, for, the representative being himself a workman in the department, he was more inclined to defend both himself and the price when poor supervision existed. The final result often proved to be a decided improvement all around.

There has now developed a co-operation between the representative, the foreman, and the time-study department, the representative acting as a sort of buffer, showing the desire to have the work done in the quickest way and on machines best adapted to it. This is important. A foreman

might claim that a man protesting a piece rate should be satisfied because the man who was previously on the same job "made good money at it." But it was found that when the representative entered the scene, there was another factor that had often been overlooked, the *type of machine* on which the price had been set. It might have been a lathe job and timed on a certain lathe, and the protesting operative might be doing the work on a different type of lathe than the one on which the original price had been fixed. This naturally led to checking up, and our records show that the result has been a *net reduction of piece prices and consequent increase in production with continued high earnings.*

It will be seen that it is but a short step from this interest by the employee and his representatives to a popular demand for what may be termed scientific methods.

I have quoted this memorandum at length because of peculiar circumstances that attach to it. It was written by an employee who was a leader of the strike which preceded the establishment of employee representation. He still retains his union membership, though he regards the union as having outlived its usefulness as an *engineering device*, even regarded solely from the point of view of the employee. The plan of representation under which, by gradual steps, the plant is being placed on a basis of scientific and at the same time co-operative management, is one of the most carefully designed plans of the joint type in the country. It has eliminated practically all serious stoppages of work due to discordant relations between men and management. It has fostered certain excellent side-lines, such as co-operative buying, and a house-organ jointly edited by employer and employee. It has now grown to the third phase of employee representation, that in which it is possible for the chief attention of *all* in the establishment to turn their minds to the most vital of all industrial questions, namely, the determination of a fair wage and "the content of a fair day's work."

At the plant under consideration the term "collective bargaining" has been abolished. "Collective dealing" is current instead. In other words, the feeling exists that the days of mere give and take, get what can be got, and yield only what must be surrendered, are gone. Employee representation is preparing each worker for his task, and through employee representation, each worker is finding the task for which he is prepared, and the basis, in terms of minutes, cents, units of product, on which he should operate.

VI

It may be objected that the same result could be achieved—is being achieved, without employee representation. But is it?

Were the above specific cases isolated examples, they would remain curiosities, not symptomatic of a trend. But the tendency is distinctly towards what may be called the new industrial education of the worker through employee representation. In the recently signed agreement in the New York cloak industry, a joint commission was ordered to study shop and labor production records and other available data "with a view to working out measures which would tend to bring up the productivity of the workers to a point fair and proper to both sides." The commission is to report progress monthly, and in its final report in November to make recommendations. Other instances might be cited. Not the least of the good features of the John Leitch "industrial democracy" is the emphasis placed on cutting out waste and building up better production methods with due rewards to the employees. . . .

One fundamental reason for the healthy growth of employee represen-

tation is that it permits the development of working relations in a systematic and orderly manner. By working relations I do not mean what ordinarily goes by the term "industrial relations." These have to do chiefly with problems of personnel rather than with problems of what we may call plant craftsmanship. Under employee representation it is possible for a keen joint management to propose and carry through to a successful conclusion any feasible program of education into new methods. Again the employer can *work with* the employee as in the old days—because employee representation permits this working relationship to be resumed on a large scale. The possibilities are endless.

Employee representation marks a radical departure in industry as well as in the history of collective bargaining or dealing. This fact is demonstrable by the most superficial consideration of the thing in itself. Looked upon as an organization, employee representation is a step ahead of trade unionism in that, first, it combines the two immediate human factors of production in a partnership; and, second, in that it groups employer and employee for the first time into units of organization which are *production units. The technique of the future will be whatever the technique of production strives for.* That it will be some form of scientific management seems to the present writer certain beyond a reasonable doubt. And if this is so, scientific management will at last have found its market, with labor as an enthusiastic and satisfied purchaser.

A MESSAGE TO THE MAILING DEPARTMENT

BY H. A. BLACKMAN *

III—THE PARCELS POST

ONE evening, a little man rushed into the workroom of a post-office carrying a frail pasteboard box which was wrapped with one thickness of paper.

"When will this get to Lafayette?" he inquired.

"By daylight tomorrow morning," the clerk replied taking the box. Seeing that it was frail, he began a closer examination, but the owner gave a little gasp and snatched it back.

"*Don't* turn that *over!*" he cried. "There's a pie in there!"

In the beginning of the parcels post service, people constantly shipped—or tried to ship—parcels with improper contents or improper packing or both. A pasteboard box with a pie in it would *not* be kept "right side up." It would go into a sack with 10 or 20 other parcels and, every time that sack was moved, those parcels would bend and twist and crush that frail box until box, pie, and all the other parcels in the sack would be involved in one common ruin. When the news of this tragedy came back to the sender, he would bitterly blame the postmaster, the clerk, the railroad, the carrier—everyone but the right one, *himself*.

Today, such a thing is almost unknown. The Department's hammering campaign of education has worked wonders. The public are required to present all parcels to trained postal workers with a statement of the contents, and the ones that should not be mailed are eliminated by rejection. Business firms have learned, usually by costly experience, how to pack their wares for safety. The result is that smashed parcels are almost a thing of the past. Yet there are a few mistakes of packing that are still common and these will be considered in the present article.

II

Firms that do a large parcels post business must have an adequate system for checking up these shipments. The best way to manage this is to prepare parcels post shipments in a separate department. These shipments should not be mixed with express or freight. They have their own problems and need careful attention.

It sometimes happens that a firm will use several insured parcels to carry one order to a customer. When the customer makes a claim of shortage, how does the firm know what package contained the article reported short? They must know the package or they cannot file claim with the Department. The plan is very simple. Each firm should have its own insurance book and prepare its own insured parcels. Each item on the order sheet can then be checked with the insurance number of the package into which it went. When any shortage is reported, the firm simply refers to the order sheet and there they have the insurance number of the short package. The claim can then be filed with all the accuracy the Department may demand.

Another matter which needs careful attention is the shipment of "Right

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Side Up" stuff. Do not depend upon *writing* or *printing* to gain this service. The character of the package must be such that one glance will show the postal worker that it must go "Right Side Up." A wooden candy pail with top nailed on, or a basket with a handle will do this. But an ordinary box or package is handled very quickly by the postal worker and he reads nothing on it but the address. "Right Side Up" signs are sure to be ignored and the package turned over 50 times before it gets home.

An unsuspected source of security for parcels post packages is that of extra frailty. Barring accidents, a woman's big picture hat is perfectly safe if shipped in one of those frail pasteboard boxes in which they are sold. Every worker who handles such a package knows that it is too weak to go into the bulk of the mail. Such packages which advertise at the first glance that they are frail—extra frail—will receive every care and attention in their travels and will often get better service than when packed in a good strong box.

The sealing of parcels in the parcels post is a new quirk of the service, but the firm which does this must know just how to do it. If a parcel is improperly sealed, it means letter postage for the customer which will create resentment and might lose his good-will. No firm should seal a parcel without careful inquiry of the post-office for instructions. These instructions are too long and prosy for this article but the parcels post clerk at any first-class post-office can make them clear in a few minutes. Do not take chances. Ask and you will be told.

It often happens that a firm or individual wishes to send a letter right along with the parcel and does not know how it can be done without making the parcel first-class mail. The method is very simple. Write, stamp, and address your letter in the usual way. Fix your package so that it is also completely addressed and stamped. Then fasten your letter anywhere on the *outside* of your parcel and the deed is done. That parcel will go as parcels post and the letter will be received right with the parcel.

But it means trouble to send any kind of a letter except a bill or statement *inside* of a parcel. This is not only a mistake but a crime punishable by a heavy fine. You can send a bill of the contents but nothing else. If you write on your bill "Three-dozen cotton hose will follow," or any other such message, the package is first-class mail if you put that bill *inside* the package. The number of firms that get into trouble in this way is amazing.

III

There are a great many possibilities of error in addressing parcels post, but they can all be avoided by a very simple rule—"Cling to the standard form." Everyone knows how the regular form is made up on a letter. The stamp is in the upper right-hand corner, the return address in the upper left-hand corner, and the delivery address in the lower right-hand corner. That same form governs in the address of parcels post. It is more than a form—it is an institution.

Postal workers always look in the places mentioned for each of those items. If you switch any of the items around and get them out of place, you are almost certain to confuse the postal worker and cause him to make a mistake. An example that has cost film companies, alone, thousands of dollars is given at the top of page 585.

The metal box of films thus labeled was intended to go to Wabash, Indiana, but it is doubtful whether it

TO

ROYAL GRAND THEATER,

224 Boone Street,

Wabash, Ind.

FROM

JOHN DOE FILM COMPANY,

725 OLIVET B'VD,

CHICAGO, ILL.

ever reached that place. The delivery address belongs below and that is where postal clerks look for it. They have little time for studying an address and they *never* see a "To" or "From." They take one glance at that box of films and see "Chicago, Illinois," where the delivery address belongs. Back it goes to Chicago—clear back to the film company because everybody follows the same rule—and the exhibitor gets no films and loses his day's show. The film company not only loses its day's rentals but has a "sore" customer on its hands—all on account of this shifting of return and delivery address.

Another frequent mistake of the parcels post is the use of an old box or packing case which already carries an old address. This is, of course, a matter of oversight, but it is most annoying and expensive. Time after time, parcels have simply vanished from the face of the earth and the only possible explanation was an extra address—and crooked people at this extra address. If you ever use old boxes, make it an invariable rule to search out and destroy all old addresses before packing them.

Here is a hint that will solve *all* addressing problems. Prepare a few thousand gummed labels—some large, some small, and some medium size—but all of them like the form below.

Such a form when properly filled out gives a perfect address which is so noticeable that it cannot be overlooked. Naturally, the lines below are for the delivery address. This form permits sealing. It avoids the possibility of getting return and delivery address on opposite sides of a package. It co-operates with the service by making a quickly worked parcel. It is so absurdly simple that it seems trivial, but it avoids every parcels post addressing danger and that is far from trivial. With varying sizes of labels for the varying sizes of packages,

CONTENTS

MERCHANDISE—FOURTH-CLASS MATTER.

Postmaster: this package may be opened for inspection if desired.

The Doe Mail Order Co.,
645 Harcourt Place,
Chicago, Ill.

RETURN POSTAGE GUARANTEED.

....

....

....

this addressing scheme will guide the parcels post around a hundred rocks of disaster. It also has the advantage of being advised and approved by the Post-office Department.

IV

Postage considerations seem trivial to a person outside the service but they run into money rapidly. Take as an example the matter of using precanceled stamps for parcels. When a firm uses precanceled stamps, its parcels avoid the delay of cancellation and go right to the dispatcher. Thus, they run in ahead of the mail carrying ordinary stamps which was prepared by the fellow who did not know or did not care. That advantage of speedy dispatch is often worth a lot of money to a business firm. The precanceled stamps cost no more than the ordinary ones and they save a wonderful amount of work and delay. It is simply foolish to overlook their advantages.

The postage rates on parcels post cannot be figured by anyone but a student of that subject. Do not leave this matter to chance or guess. The best way is to have scales, zone book, and a trained man to weigh each parcel and mark the amount of postage upon it. Other workers can stamp the parcels but the work of determining the postage is expert and an expert must be provided for it. The best scales are those that automatically figure the postage for each zone, but, if such scales cannot be had, the ordinary scales will do and the postage may be figured from this table:

Zone	1..........	1 × No. of lbs.	+ 4.
"	2..........	1 × " " "	+ 4.
"	3..........	2 × " " "	+ 4.
"	4..........	4 × " " "	+ 3.
"	5..........	6 × " " "	+ 2.
"	6..........	8 × " " "	+ 1.
"	7..........	10 × " " "	+ 1.
"	8..........	12 × " " "	

Now, let us see how it works. A parcel which weighs over 24 pounds is a 25 pound parcel. If it goes to the first or second zone, merely add 4 to the 25 which makes its postage 29 cents. The formula for the third zone is—$2 \times$ No. of lbs. $+ 4$. $2 \times 25 = 50 + 4 = 54$ cents. If it goes to the sixth zone, the formula is—$6 \times$ No. of lbs. $+ 2$. $6 \times 25 = \$1.50 + 2 = \$1.52$.

The table can be memorized in a few minutes. If you will note the first two zones, you will see that a child could hardly forget their formula. Beginning with the third zone, you will note that the multiplier runs 2, 4, 6, 8, 10, 12 for each zone respectively. The extra addition runs 4, 3, 2, 1, 1. If these points are kept in mind, anyone of fair ability can memorize the table in two minutes.

Do not use ordinary stamps on parcels to secure special delivery. They are so easily overlooked that special delivery packages bearing them often get into the ordinary mail and are transported and delivered as such. Use a regular special delivery stamp and then use a large typed rubber stamp to print "Special Delivery" in several places around the address. When clerks look at that delivery address, your "Special Delivery" shines right up at them and they cannot help noticing it.

Insurance is very cheap and should never be omitted upon valuable packages. The insurance requires certain "red tape" but it is quickly attended to at the post-office. C. O. D. stuff is automatically insured and this also requires certain forms, but it is all very simple. The one particular point to be observed with the C. O. D. is the proper observance of the required formalities. If these are not observed the C. O. D. goes as ordinary mail and is often a dead loss. Another mistake often made with the C. O. D.

is to promise a patron the privilege of examination before acceptance. The Department forbids such examination and any representation to buyers that they will have this privilege is sure to create resentment when it is denied.

V

The most valuable piece of advice that I have to offer to parcels post shippers is "Put a trained man in charge." Provide him with the yearly postal guide and its supplements and let him understand that you expect him to learn and know the parcels post law and keep up to date on its changes. These books are so cheap that parcels post shippers cannot afford to be without them and they may be obtained right at your own post-office. Whatever you do, do not let your parcels post business drift along upon the "guess and miss" plan. It is too expensive.

For the very large user of the parcels post, I have a still stronger piece of advice. Go to your own post-office and quietly inquire the name of the "crack" parcels post dispatcher at that office. Get an interview with him after the Superintendent of Mails understands your purpose and has recommended him. Talk with him a while and decide if he has executive ability. If he has that ability, hire him on the spot. Do not haggle about salary, do not let him get away from you. Put him in full charge of your parcels post shipping and then sit back with a long sigh of relief and watch him save you 10 times his salary and an ocean of worry besides.

This looks like a piece of underhand work against the Post-office Department but it is not. The biggest problem of the parcels post today is to get brains and knowledge at *the source of supply.* Such a man will save the Department more work in your office than he will do in the post-office and that's a sure gain to the service. He will send your parcels to the post-office in such shape that they will get the cream of the service. He knows how to avoid all the dangers and he knows just how to gain all the benefits. Let me explain just a few of the things that he would do.

First, he would keep up his study upon the changes of the service because each week sees some new order put out. The Department has already taught him the one big lesson—"No one man knows it all" so he is not ashamed to inquire at the office for information. His friends at the post-office will welcome the fine mail that he will put up, and, because it saves their time and labor, there will be no chance overlooked to do a favor for that mail. In brief, his influence with the workers combined with his excellent preparation will gain the cream of the service for his mail.

And that is only the beginning. He would be too shrewd to save his parcels for one big mailing in the evening when congestion brings delay and damage, but would rush his parcels to the office all day long. He would omit the county from all addresses. He would know just how to use the "Fragile" stamp and how to get results with it. He would go to the post-office with each truck-load of parcels in order to make sure that they were properly delivered and that the insured and C. O. D. were properly signed for. In a hundred ways he would stop all parcels post leaks and thus would do a wonderful service both for you and the Department. This is the biggest hint that I have to offer to the heavy user of the parcels post.

THE SURPLUS OF CORPORATIONS

BY PAUL W. PINKERTON*

II—THE CLASSIFICATION OF SURPLUS

THE term "surplus" is very broad in its scope, in that it is used simply as a title for the balancing figure between the net assets and the amount of capital stock. In fact there is no accepted interpretation which can invariably be placed upon surplus. It embraces a range of items from earnings to the showing of arbitrary appreciation, including amounts legally available for dividends along with some which could by no stretch of the imagination be considered as proper for that purpose.

In certain businesses and industries, however, the term has developed special meanings. In banks, for example, the general practice is to carry the amount of earnings to an Undivided Profits account, from which, by order of the board of directors, such amount as seems advisable is carried to the Surplus account, where it remains permanently. Dividends are paid only out of the Undivided Profits account, and any amount which has been transferred from this account to the Surplus account is almost as inviolable as the capital stock itself and is no longer considered available for dividends.

Banks frequently sell their capital stock at a premium, and this also is carried to the Surplus account, so that in the case of banks the term "surplus" means the amount of the excess of net assets over capital stock which has been set aside as not available for dividends. A few other industries and large numbers of separate business men and concerns have similarly adopted limitations of their own upon the employment of the word "surplus."

Such special uses have in many cases become so well established that no change in the interest of general uniformity may be expected. As a result surplus means one thing to one man, while to another it may mean an entirely different thing. Since this confusion exists and cannot readily be dissipated it must be faced and surmounted.

Usually the best way of accomplishing this is by dividing the functions of the Surplus account among several accounts, each of which will have a title sufficiently distinctive to show the source of its balance. If this is not actually done upon the books of account, it should at least be shown upon all financial statements.

II

There are two main classifications of true surplus, known generally as earned surplus and capital surplus. The former of these is by far the most common form of surplus, and the word "surplus" probably carries with it the connotation of "earned surplus" more often than any other. In this usage, however, the term "earned surplus" is limited to earnings resulting from the normal operations of the business, such extraneous and unusual profits as those resulting from the sale of capital as-

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sets, etc., being considered a part of capital surplus.[1]

If, then, instead of having on the books one general Surplus account, there are two or more accounts in which the surplus arising from different sources is divided, the credits to the Earned Surplus account would consist of entries showing the amount of:

1. The net profit from normal sources, as determined at the close of each fiscal period
2. Any adjustment during a fiscal period which increases the normal profit of a previous fiscal period

The debits to the account would consist of entries showing the amount of:

1. The net loss from normal sources, as determined at the close of each fiscal period
2. Any adjustment during a fiscal period which diminishes the normal profit of a previous fiscal period
3. Any dividends declared out of earned surplus[2]

If there is on the books an account known as Undivided Profits, its balance also would ordinarily form a part of the earned surplus. The uses of such an account are three. In one usage Undivided Profits account has the same meaning as that assigned above to Earned Surplus; in another it is the account in which earnings are first entered and from which certain amounts are occasionally transferred into the Surplus account. This method merely subdivides the earned surplus into two accounts more or less arbitrarily. The third use of the account as distinguished from Earned Surplus is as a place in which to carry the unappropriated or undistributed profits of the last closing, the undivided profits of other periods having been transferred to the Surplus account.

Any balance shown on the books in the Profit and Loss account is also ordinarily a part of the earned surplus.

III

All true surplus not from the ordinary operations of the business is styled capital surplus, and includes the amounts of:

1. Any unusual or extraneous profits, such as those arising from the sale of capital assets.
2. The premium received on the sale of the corporation's capital stock.
3. Payments made on stock subscriptions, if forfeited on account of failure to complete contract.
4. Assessments on stock after its par value has been paid in.
5. The difference between the par value of reductions of capital stock outstanding and the recompense paid to the holders, if less than par.
6. The excess by which the value of tangible assets received for stock unquestionably is more than the par of the stock issued therefor.
7. The profit on sales of treasury stock which had been repurchased for value.

All of these except the first are sometimes called paid-in surplus or contributed surplus.

When a separate account is maintained on the books for Capital Surplus, the credit to it would result from entries recording the above transactions. The debits would be from entries recording the opposite condition, such as discount given on the sale of capital stock, loss on the sale of capital assets, etc., and from dividends declared out of capital surplus.[3]

[1] Robert H. Montgomery, "Auditing Theory and Practice," 1922, Vol. 1, p. 279; Henry C. Cox, "Advanced and Analytical Accounting" (Vol. IV of Business Accounting Series), 1920, p. 99; C. B. Couchman, "The Classification of Surplus," *Journal of Accountancy*, Vol. XXXII, p. 267 (October, 1921); Conyngton, Bennett, and Pinkerton, "Corporate Procedure," 1922, p. 1058.

[2] The debits to Surplus on account of its impounding or appropriation will be discussed in the next article in this series

[3] The impounding or appropriation of capital surplus will be discussed in the next article in this series.

IV

When stock is sold by the corporation at a price above its par value, the excess over par is the premium. All except the first and last of the sources of capital surplus above mentioned constitute varying kinds of premium on the sale of stock, and surplus resulting from premiums is often (and properly enough) carried on the books simply as "Premium." A corporation whose first issuance of stock is at a premium will obviously have a surplus to the amount of this premium from the date of its organization.

Stock is sold at a premium primarily because it can be—because more money can thus be raised. In the case of national banks, and of state and other banks whose stockholders have a personal financial liability in case of failure, there is the added value of the relief from that liability secured by the payment into the corporation of an excess above par. The National Bank Act, for example, provides that in case of failure of the bank stockholders shall be liable for twice the amount of their capital stock. If they have paid into the bank's treasury twice par at the time of purchase of their stock, they are immediately relieved from further liability. The principle applies proportionately to any lesser amounts of premium, as the purchase of $100 stock for $125 or $150 per share. Any dividends, however, which may be declared out of the premium thus received by the bank, if they have the effect of reducing that premium below the amount for which stockholders are liable to creditors, would counteract the freedom from liability secured by the original premium.

When it is felt that stock of no par value must for one reason or another be carried on the books at an arbitrary nominal value—a practice for which there seems to be little reason[4]—the excess at which it is sold above this nominal value is capital surplus.

Premium received on stock is capital surplus, no matter by what name it may be carried on the books.

If its stock is issued by a corporation in exchange for tangible assets which have a value unquestionably greater than the par value of the stock issued for them, capital surplus is thereby created just as fully as if cash in excess of the par value had been received. The valuation of intangibles is, however, so much a matter of opinion that it would be difficult to say that any such assets purchased for stock had a value unquestionably greater than the par value of the stock issued therefor. For this reason it is doubtful if it is ever allowable to create a surplus on account of intangibles purchased with stock.

Capital surplus resulting from the reduction of the par value of capital stock outstanding without full recompense to the stockholders frequently arises in reorganizations, when the par value of the stock issued to the stockholders is less than that of the stock previously held by them and now surrendered. The original stock was paid for with cash or other assets; wherefore, if less stock is now issued the excess becomes a premium on the purchase of the new.

Assessments on stock, when lawful or when accepted, also form capital surplus. Such assessments are often made, pro rata on the outstanding shares in cases of reorganization or impending bankruptcy, and are generally used for wiping out a deficit from operating losses. In the case of fraternal insurance and similar organizations, such assessments are levied in order to provide for expenses and losses as they arise.

[4] Conyngton, Bennett and Pinkerton: "Corporate Procedure," Book III, Ch. 11.

V

The capital surplus resulting from transactions in treasury stock presents some problems which must be considered.

Treasury stock is that which has once been issued for value and which through purchase or gift has been returned to the possession of the issuing company. The unissued stock of a corporation is not treasury stock and should never be so styled.

Treasury stock consists of both repurchased and donated stock and the principles applying to both classes are the same, but since there are necessarily certain differences in the handling of the two kinds they will be distinguished in this article as "repurchased" and "donated" stock. It is perhaps unnecessary to say that there is no relation between the repurchase by a corporation of its own capital stock and the purchase by it of the stock of another corporation, and that nothing which follows has to do with the latter transaction. It should perhaps be noted also that the repurchase of a corporation's own stock is not permitted by the laws of some of the states except under specified conditions.

The price at which a corporation repurchases its stock may be par, or below or above par, as it is entirely a matter of bargaining between buyer and seller. This is true even in the case of preferred stock issues in connection with which it is stipulated that the stock may be redeemed at, within, or after a certain time at a fixed price, for in this case the bargaining or offer and acceptance are concluded before the original sale. No matter what the price at which the stock was repurchased, the principle is now generally accepted that it should be carried on the books of the corporation and on its financial statements at par. The practice was formerly different, but although the balance of the Treasury Stock account is a debit, treasury stock cannot be considered an asset, similar to stock of another corporation. The acquirement of treasury stock is a reduction, for the time at least, of the amount of capital stock outstanding, and should be shown on the balance sheet as a reduction from capital, thus:

Capital Stock	$200,000
Less Stock in Treasury	25,000
Outstanding	$175,000

If treasury stock were carried on the books in any other way than at par, this offset could not be made without taking into consideration facts not shown on the trial balance. If the above treasury stock with a par value of $25,000 had been purchased for $20,000 and entered on the books at cost, the deduction of $20,000 from the capital stock would show an erroneous amount of outstanding stock.

VI

When treasury stock purchased at less than par is carried on the books at par an unearned surplus is created to the extent of the difference between par and the purchase price. Since the purchase price of donated stock is nothing this surplus is largest in the case of donated stock.

The donation of stock back to a corporation by its holders is an anomalous proceeding which always invites investigation or avoidance on the part of careful investors. The purpose of such donations is to provide working capital, usually in cases where the entire or a large percentage of the corporation's stock has been originally issued for fixed or intangible assets, leaving no means of securing funds for

making those assets yield an income. The motive behind such a transaction is found in the fact that stock once issued "for value," can thereafter be resold by the corporation at less than par without committing the purchaser to any liability on account of its purchase at a discount.

It may usually be assumed in cases of donated stock that the donation to the corporation of capital stock immediately after its issue for property of some kind is *prima facie* an indication that the assets purchased were turned in at so inflated a value that those who turned them in are more than recompensed by the amount of stock which they have withheld. The assets being thus carried at an inflated value, there is no real surplus existing in the donation, and for this reason such surplus requires separate treatment.

As has been said, when stock is donated back to the treasury of the issuing corporation a donated surplus is thereby created technically for the par value of the stock. No real surplus, however, exists until the stock is sold, at which time it may be considered that a surplus has been created to the amount for which the sale of the stock was effected. Such a surplus would be true surplus and, unlike a book surplus created by entering the donated stock at par, would be available for dividends.

But since the assets were evidently turned in at an inflated value (or else those who sold them to the corporation for stock would have been unwilling immediately to donate part of the stock back to the corporation) and are carried on the books at an inflated value, it is questionable whether a surplus should be shown on account of the sale of the donated stock or whether the book values of the assets should be reduced by the par value of the donated stock or at least the amount for which it was sold.

It is hardly within the scope of this article to go into the arguments in favor of and against each of these three methods of handling such transactions,[5] and the discussion will be limited to the classification of the surplus shown when the surplus is allowed to stand under the method first above suggested.

While the surplus which results from the sale of donated stock may be allowed to stand and be considered a true capital surplus, it is frequently considered more accurate or at least more conservative to style it "donated surplus" or "working capital donated," in order that the books and published statements may reflect the technically legal inflation of asset values.

But the surplus which is set up on the books in order to carry the donated stock at par is a surplus which is by no means realized and may never be realized to its full extent. It becomes actual surplus only to the amount for which the stock is eventually sold. This unrealized surplus, which could under no conditions be used for dividends and which by all means should be used to furnish working capital except under such conditions that merely to list them would at once suggest the unlikelihood of their happening, is an unrealized increment,[6] and can perhaps be best so classified in our general segregation of the various kinds of surplus. Other examples of unrealized increment will appear later in this article.

[5] For a more complete discussion see Conyngton, Bennett and Pinkerton: "Corporate Procedure," Book III, Chapter X, "Par-Value Donated Stock."

[6] This term was first specifically suggested, the writer believes, by H. A. Finney in an excellent paper on "Reserves" read before the American Institute of Accountants at its annual convention in Chicago in September, 1922.

VII

The same general principles which apply to the book surplus created by the donation of stock and to the capital surplus resulting from the sale of that stock are also applicable to the repurchase of stock. In the latter case, however, the true surplus is the amount, if any, for which the stock is sold above the purchase price.

Since it is proper to carry repurchased stock, like donated stock, at par as an offset to the entire amount of stock which has been issued, a book surplus will necessarily be created when stock is repurchased at less than par. The amount of this book surplus or unearned increment will be the difference between par and the purchase price. When the stock is sold the result of the transaction in repurchased stock will necessarily be a gain or a loss unless the purchase price and the sale price are the same. If this result is a gain, capital surplus is increased to that extent. If it is a loss, capital surplus is decreased by the amount of the loss. In either case the unearned increment disappears from the books and from the financial statements and is replaced by the amount of the true surplus or by the reduction of surplus which occurs when the stock is resold for less than the price at which it was purchased.

Just as the unearned increment resulting from the carrying of donated stock at par is often distinguished by being styled "donated surplus" or "donated working capital," so the same type of addition to book net worth in the case of repurchased stock is often called "contingent profit on treasury stock." This contingent profit on treasury stock may never be realized. If the stock is sold at less than the price for which it was repurchased, the contingent profit will be supplanted by a charge against any real surplus which may exist, capital surplus first and earned surplus thereafter should there be insufficient capital surplus to absorb the loss.

If the stock is not resold the contingent profit on treasury stock will stand on the books continuously. If there is no intention of reselling the stock, the contingent profit comes very near to being, if it does not fully become, an earned rather than an unearned increment, for the capital stock has been permanently reduced without an equal reduction in the assets.

When such a repurchase of treasury stock is meant to effect a permanent reduction in the amount of stock outstanding, the only objection to considering the discount at which the stock was rebought as a real surplus is found in the fact that the corporation, because there is no reduction in the authorized issue, has the legal right subsequently to sell that stock at less than par should that course seem necessary or desirable. If the purchase of treasury stock at a discount is followed by a reduction in the amount of capital stock authorized to be issued, the contingent profit immediately and properly becomes true capital surplus.

It will be readily apparent that there can be a contingent profit only on stock which is repurchased at less than par and consequently has to be written up to par, and that no real surplus can result from transactions in repurchased stock unless the price at which that stock is sold is greater than the purchase price, or, in the case of stock retired by a reduction in the authorization, unless par is above the purchase price.

VIII

Another example of an unearned increment is surplus which appears on

the books as a result of a reappraisal of fixed assets. When it is felt necessary to increase the book values of capital assets whose market value has increased since they were acquired, the credit should never be merged with real gains legally available for dividends, but should be entered specifically as "surplus from appreciation" or "appreciated surplus" or less definitely as "unearned increment."

Indeed, the rule may be made absolute that a tight line should be drawn between surplus resulting from such sources as make it available for the legal declaration of dividends, and surplus entered on the books merely to offset some increase in values above cost, such as the carrying of treasury stock at par or the appreciation of fixed assets. The practice of entering appreciation on the books is widely condemned because of improper inflations which may be hidden behind it. This condemnation is not due to anything inherently wrong in that procedure, but results from the confusion which follows the attempt to overdo such recording of fluctuations of value, and from the misfortunes which have resulted from making it appear as though a dividend were possible when it was not so in truth. An argument may be made for entering increases of value which are permanent and reasonably definite in amount, and if a surplus so created be displayed on the balance sheet in such a way as to be definitely separated from surplus arising from other sources, no one need be deceived by it.

When surplus is created by appreciating the book values of capital assets, this surplus must be reduced through the remainder of the life of the asset. This very important point should not be overlooked. The depreciation on assets carried on the books at an appreciated value should therefore be divided into two parts, as not all of it is a charge against income. The portion of the depreciation which applies against the cost of the asset is properly a debit to income, but the part which applies against the appreciation must be charged against Surplus from Appreciation, and not as an operating expense.

For example, a factory is erected on a certain piece of property at a cost of $100,000. If the life of the building is estimated at 50 years, an annual amount of $2,000 will have to be charged against income for the depreciation of the building (using straight-line methods). If at the end of 10 years the building is appraised at $200,000 and it is thought necessary to put the appraisal figure on the books, the entry required will be as shown at the bottom of the page.

The remaining life of the building is 40 years, over which the present book value of $200,000 must be charged off, making an annual reduction by straight-line methods of $5,000. But since an annual charge of $2,000 will be sufficient to extinguish the cost of the

Buildings		$120,000	
To Surplus from Appreciation			$120,000
To record increase in value of building from its present book value of	$100,000		
Less: Reserve for Depreciation of	20,000		
Net book value	$80,000		
To the appraised value of	200,000		
An appreciation by appraisal of	$120,000		

asset at the expiration of its period of usefulness, the remaining $3,000 must be charged against the amount of appreciation. The annual entry will be:

Depreciation	$2,000	
Surplus from Appreciation	3,000	
To Reserve for Depreciation		$5,000

(With the proper explanation)

A proof of the accuracy of this method is shown by the following figures. The $120,000 of Surplus from Appreciation previously set up is charged off at the rate of $3,000 for 40 years, clearing the original appreciation during the life of the building. The cost of $100,000 is charged off at the rate of $2,000 a year for 50 years. The amount charged to Buildings account, namely, $100,000 of cost and $120,000 of appreciation, is offset at the end of 50 years by a Reserve for Depreciation made up of:

$2,000 per year for 10 years	$20,000
$5,000 per year for 40 years	200,000
Total	$220,000

Only the $2,000 depreciation of the actual cost of the building is a charge against income.

IX

A third form of unrealized increment consists of those other profits which it is sometimes thought advisable to enter upon the books, but which under the principles of good accounting should not be taken up until they are actually realized.

An increase in the valuation of an inventory above cost because the market has gone up is the conventional illustration. There are many [7] who feel that a dealer in listed securities is justified in inventorying his "stock on hand" at the market price, even when that is higher than cost, but even if such an appreciation is admitted to be permissible it is unrealized and should not be considered a part of the true surplus.

An example in some ways more satisfactory and in some ways less is found in the Unrealized Gross Profit account which dealers on the instalment basis are required to carry by the United States Bureau of Internal Revenue if they are to report their profits as taxable income when realized by collection instead of when the sales are made. This account is originally credited with the entire amount of gross profit to be made on the transaction, or in other words with the difference between the cost of the goods sold and the contract price for which the sale is effected. All payments received are to be divided between cost and profit so that the profit represented in each payment is in the same ratio to the entire payment which the profit to be realized when the contract is fully paid bears to the entire contract price. The profit is thus to be realized by collection and is not considered as being realized when the sale is effected.

It would be ridiculous to say that there is a definite dividing line on one side of which it is allowable for dealers to consider their profits as fully earned when they have set up the account receivable, and on the other side of which it is not allowable for them to consider the gain effected until they have obtained the money, but if dealers adopt the "instalment method" of reporting for income tax purposes they are required to carry the unrealized gross profit outside of surplus as an unearned increment, not available for invested capital calculations in those years in which invested capital was a factor.

[7] Cf. Robert H. Montgomery: "Auditing Theory and Practice," 1922 ed., Vol. 1, p. 84.

X

There are certain exceptions to the general rules defining what constitutes unearned increment. Certain donations to corporations constitute true capital surplus as, for example, donations by outsiders of factory sites and other valuable bonuses such as are sometimes given to induce business enterprises to locate in certain places.

There is another kind of surplus which, while related to surplus from appreciation, is of unquestioned propriety. When one company owns the stock of another and a consolidated balance sheet is prepared showing the total assets represented by the stock of the first company together with its existing liabilities, it is necessary to substitute for the cost of the stock of the subsidiary company the entire list of the assets of that company together with its liabilities. It is seldom that the net worth of the second or subsidiary company, as shown by its books, will be exactly equal to the cost of its stock to the holding company, and in the preparation of the consolidated balance sheet the difference must be taken up through a consolidated surplus (or a consolidated deficit, if the book net worth of the subsidiary were less than the cost of its stock to the holding company). This, too, is a true capital surplus if the surplus of the subsidiaries is properly based.[8]

XI

Instead of the two classes of true surplus, i.e., earned surplus and capital surplus, we have divided the surplus of corporations into three major classes: earned surplus, capital surplus, and unearned increment. A classification of surplus on another basis might be made as follows:

1. Available for dividends—
   earned surplus
   capital surplus
2. Not available for dividends—
   unearned increment

There is another type of surplus which is temporarily rendered unavailable for dividends by being impounded or reserved for other specific purposes. Its consideration is deferred to the following article of the series.

The foregoing classification of surplus is not accurate in all respects. For instance, such an arbitrary inclusion in unearned increment as the unrealized gross profit of instalment dealers, though practically so, could hardly be held technically unavailable for dividends.

It may perhaps be asked—should one go to the trouble of classifying the surplus of a corporation? Broadly it is for the purpose of showing whence this surplus comes and to segregate that which is not available for dividends from that which is so available.

It is important that this same classification should also appear on the financial statements of the corporation so that those to whom these statements go may more readily understand the true condition as revealed by this segregation of sources of surplus. Indeed the failure so to classify surplus on the balance sheet when different classes exist is in itself looked upon as a suspicious occurrence by those whose duty it is to scrutinize financial statements.

[8] See H. A. Finney: "Consolidated Statements for Holding Companies and Subsidiaries," Ch. 3, 1922; and Conyngton, Bennett and Pinkerton: "Corporate Procedure," Book III, Chs. 34 and 35, 1922.

(*Article III—"The Impounding of Surplus" will appear in the January number of Administration.*)

THE DETERMINATION OF EARNINGS

BY J. K. MASON*

OUT of the investments of shareholders, a manufacturing enterprise acquires certain wealth known to economics as *capital goods*—to finance as *capital.* At the inception of the enterprise, such capital is converted in part into those things known as *fixed* capital—the land, the buildings, the equipment by means of which the proposed undertaking is to be carried out. A further part is used for the provision of the so-called *working* capital—the cash, the credits, the materials out of which shall grow the thing termed "product."

Capital values are known and talked of in terms of money. This circumstance, however, is born of the fact that money, having been accepted as a medium of exchange, has become thereby the ordinary medium of valuation. The money value of any item of capital is the price which mankind is willing to pay in order that it may make use of the quality existing in that item to satisfy a particular human want. That quality in any item is called its *utility.* It is the quality inherent in a building to satisfy the requirement of shelter, in the bar of steel to satisfy the want for strength, elasticity, temper, that gives to each its respective worth. Utility, therefore, underlies money value.

But though the true value grows out of utility, custom has come to think of that value in terms of its money equivalent. Out of this circumstance it becomes possible to create and operate the system of intelligence known as accounting practice. Through its means the utilities acquired, converted, absorbed, expended, created and exchanged, may—in terms of their money equivalents—readily be tabulated and compared. By the information thus provided, the manufacturing executive may exercise that control of his enterprise so essential to its economic purpose.

The purpose of industry is the generation of earnings. They reflect the excess of value in the utilities created and sold, over the value of the utilities that are expended in completing the acts of creation and sale. The utilities expended are known to manufacture as "raw materials," "skill of employees," "shelter of buildings," "energy of fuel," and so on to the inclusion of the many classes of service used. The utilities created are known as "product."

The value in money of the product that is sold is called "income." The value in money of utilities expended is known by the term "expenditure."

II

Before proceeding further it would be not unwise to examine what takes place, economically, during the generation of earnings. In the first place, as cited in the opening paragraph, capital is acquired and apportioned. From the start of operation—aye, even from the instant of acquirement—that capital enters a continuous process of conversion and expenditure that never can cease unless and until the capital itself has been completely dissipated. To avoid dissipation, the process of conversion and expenditure must repro-

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duce values equal to those of the capital expended. To generate earnings it must create values in excess of those expended.

To differentiate between the acts of conversion and of expenditure it may be conceived that if, after use, a capital value still exists in form capable of further use, that value is converted. If, however, a value once used has ceased to be available for further use in any manner, it is to be regarded as expended.

Product is capital in converted form. Values in raw materials and in purchased skill of mechanics, artisans, etc., whose effort is given to the direct creation of product, are combined during the acts of creation into new values called semifinished and finished product. So long as these new values remain in form suitable for further combination or for sale, they represent capital converted. When such suitability ceases, then are they to be considered capital expended. These values that pass directly into semifinished and finished product, are grouped by accounting under the term "direct costs."

But during the process of conversion, other capital than that converted must be absorbed for the performance of other activities that, though not directly creative, are needed as supplements to the acts of creation. In the case of some items, such capital cannot technically be distinguished from that considered as used for direct creation; but for the sake of clarity in the study of economic phases, it is needful to draw a clean line between the two classes of use. It is the lack of such line that has tended to obscure the economic motif that lies beneath all problems of accounting.

The values of capital absorbed for supplementary activities, are grouped in accounting under the term "overhead." Contention exists as to what capital values shall, after absorption, be considered under the description "direct costs," and what under "overhead." For the sake of definition it may be said that the former (direct costs) cover the values of that capital that has been applied directly to the creation of product and without which the product could not take form; that the latter (overhead) includes the values of such capital as may have been applied to the operation of the enterprise but whose application makes no direct contribution to the formation of product itself.

Direct costs may readily be classified as those capital values which come to the point of expenditure only after conversion. Such expenditure may be realized by sale, by scrappage, or by wasted effort, but must exist only as a result of prior conversion. Overhead, on the contrary, shall cover those capital values that reach the point of expenditure immediately upon use. Again, however, arises contention by the theory that capital may be absorbed for purposes whose effects are intangible, but whose values in capital may be deemed to be included in the value of physical inventories. Taken broadly, that theory is rendered entirely correct by the fact that in technical truth, physical inventories embody the values of all absorbed capital, if the question of availability is disregarded. The fact is, however, that an enterprise is compelled to consider availability, by the condition that capital must be absorbed for the purchase of certain commodities and services whose utilities are available only in their original form or condition and whose consumption takes place as rapidly as purchase is made. This economic fact, coupled with the need for practicability in accounting principles, develops an added reason for the distinction between direct costs and overhead.

But even the distinction as above

indicated is not sufficient for practical purposes. There are frequent items of absorbed capital whose values might be classified as direct costs but which, in practice, would be very difficult of allocation to product. For this reason it must be taken that direct costs—as considered in economic accounting—cover those values of capital applied directly to the creation of product, which, during conversion into product, may be allocated directly to the unit of product created: that overhead covers all other capital values absorbed.

So, to recapitulate, the following conceptions may be taken:

Income is the value in money of the utilities sold

Expenditure is the value in money of utilities absorbed and no longer available

Direct Costs are the value in money of utilities whose contribution at the time of absorption may be allocated directly to the particular utility created

Overhead is the value in money of those utilities whose use is for activities supplementary to the creative acts, or whose contribution to the utility created cannot readily be determined

III

For the purposes of that part of accounting intelligence called the Operating Statement, direct costs and overhead represent those capital values that have been expended in the generation of the income tabulated on the statement. But while the values included thereon as direct costs and overhead are both tabulated under the heading "Expenditures," it must be recalled that the direct costs have become expenditures only because of the sale of that product for the creation of which the capital values represented by direct costs had previously been converted; whereas overhead became expenditure immediately upon use, and would continue to be such, even though there were no product sold.

But though values tabulated as direct costs represent capital that previously has passed through the conversion stage, it must not be concluded that all converted capital may be expended only as a direct cost. If, for example, cash is used for the purchase of materials and of human skill, which in turn are combined for the creation of a piece of equipment, the elements of working capital represented therein have been converted into what becomes known as fixed capital, and its value proceeds to pass through a slow process of expenditure whose effect may best be recognized in the facts of the operating statement under the term "Executive Appropriations."

This group of figures includes items that ordinarily are considered a part of overhead. The capital expenditure that they represent may readily occur, whether or not product has been created and sold. Their values cover such effects as depreciation of fixed capital, losses from accounts uncollectible, decrease in inventory values—capital depletion resulting from chance, use, and possession, which depletion becomes expenditure even though no other capital values have been expended either as direct costs or overhead. In other words, depletion may occur, even though operation may have ceased. For this reason it seems best to segregate the values represented by that type of expenditure.

The logic in grouping such items under the name "appropriations" is born of the fact that, in practice, it is not always easy or even possible to know the exact degree of their "expenditure." The best that can be done is to calculate as accurately as possible the depleting effect of chance,

use, and possession, and to appropriate from income a sufficiency of funds to safeguard the integrity of capital owned and to replenish such actual depletion (or expenditure) as later proves to have occurred.

IV

The Operating Statement mentioned heretofore, is that element of the accounting system whose object it is to tell the facts of income and expenditure for a given period or series of periods. Its arrangement of facts should tell an executive what values of capital have been converted into and sold as product; what additional values have been expended for the supplementary activities of operation, how greatly his capital has been depleted during the period as the result of chance, use, and possession; and what income has been returned to the enterprise as the effect of such expenditures. Such facts will discover whether income has been sufficient to replenish the capital expended; whether capital has been increased by the addition of earnings, or whether capital has been dissipated by an excess of expenditure over income.

In study of the Operating Statement an executive must reckon upon learning from it the economic—and frequently rather harsh—facts about his achievement. It is certain that he cannot dictate economic law. But if he will consent to know the economic truth about his enterprise, he may, within the limits of his knowledge of the law, control in great measure the effect of that law upon his undertaking.

From a practical accounting standpoint, the Operating Statement must be based, in its story, upon a properly arranged schedule of accounts. In a previous article, brief treatment was given to the subject of Economic Control Through the Medium of Account Classification. The possibility of avoiding capital dissipation was there predicated upon the correct conception and arrangement of capital and investment facts. In the account schedule accompanying that article the last group of accounts under the "Investment" division is entitled "Current Operating Surplus." This group is intended to explain the changes of investment value that have been occasioned by increase or decrease of capital values. It is upon this group as a basis that the Operating Statement shall be constructed. Current Operating Surplus is a residue from Earnings; they in turn being an index to the success with which operation has been carried on.

V

For the sake of study, an illustration is here given of an operating statement made to cover a period of three months of operation. A comparison of its account arrangement with the schedule just mentioned, will discover that details of fact have been expanded to cover only the more important divisions of the account Current Operating Surplus. It is to be understood, however, that the figure of each sub-account as given must be susceptible of analysis into further details within the subsidiary books of account from which the statement shall be accumulated. Of the six major divisions of Current Operating Surplus, three—namely: Direct Costs of Sales, Operating Overhead, and Executive Appropriations—have been treated in the foregoing discussion. The remaining three may readily be understood from a study of their details in the classification of accounts.

While those divisions with their necessary subdivisions comprise the whole detail upon which Surplus is

OPERATING STATEMENT AS OF MARCH 31, 1922, FOR THE PERIOD COMMENCING JANUARY 1, 1922.

INCOME AND EXPENDITURE						EARNINGS AND SURPLUS									
Acct. Index	Item	Income		Expenditure		For Period to Date			End of Last Month		For Month Just Closed				
		Amount	% of Total	Amount	% of Total	Analysis	% of Sales	Turn-over	Income	% of Sales	Income	Expen-diture	Analysis	% of Sales	Turn-over
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
24	Current Operating Surplus														
241	Sales Invoiced														
2411	Sales of Product	$380,000	93.9								$148,000				
2412	Sales of Raw Material	5,000	1.2												
2413	Sales of Scrap	15,000	3.7			$400,000			$250,000		2,000		$150,000		
242	Direct Costs of Sales														
2421	Direct Costs of Product Sold			$197,000	62.2							$87,000			
2422	Direct Costs of Raw Mat. Sold			1,000	0.3										
2423	Direct Costs of Scrap Sold			2,000	0.6	200,000	50.0	133.3	110,000	44.0		3,000	90,000	60.0	47.4
	Profit Over Direct Costs					$200,000			$140,000				$60,000		
243	Operating Overhead														
2431	Factory Administration			20,000	6.3							7,000			
2432	Sales Administration			40,000	12.6							12,000			
2433	Financial Administration			15,000	4.7							5,500			
2434	General Administration			30,000	9.5	105,000	26.3	70.0	71,500	28.6		9,000	33,500	22.3	17.6
244	Executive Appropriations														
2441	Depreciation of Fixed Capital			7,500	2.4							2,600			
2442	Current Assets Uncollectible			1,000	0.3							500			
2443	Decrease of Inventory Values			1,000	0.3							400			
2444	Contingencies			500	0.2	10,000	2.5	6.7	6,300	2.5		200	3,700	2.5	1.9
	Profit From Operation					$85,000			$62,200				$22,800		
245	Income Variants														
2451	Income Deductions			2,000	0.6			1.3				700			0.4
2452	Income Additions	5,000	1.2			3,000	0.8		3,200	1.3	500		200	0.1	
	Net Earnings					$88,000	22.0		$65,400	26.2			$22,600	15.1	
	Totals of Income and Expenditure	$405,000	100.0	$317,000	100.0			211.3			$150,500	$127,900			67.3
246	Profit Distribution														
2461	Government Taxes on Income					12,760	3.2		9,480	3.8			3,280	2.2	
2462	Dividends to Shareholders					3,000	0.8		2,000	0.8			1,000	0.7	
	Current Operating Surplus					$72,240	18.0	211.3	$53,920	21.6			$18,320	12.2	67.3

Note: Column I based on Working Capital at beginning of period, which was $150,000
Column P based on Working Capital at beginning of month, which was 190,000
Total Investment at end of last month was 428,921
Ratio of Net Earnings this month to that investment 5.27%

constructed, yet their mere tabulation is not sufficient for executive intelligence. The tale must be expanded. Comparison is essential; and for that reason it is necessary to establish a logical routine upon which tabulation can proceed to a desired end.

Examination of the illustrative statement will discover that all facts are tabulated under the heading either of Income or Expenditure as the case may be, with the exception, however, that the items of Profit Distribution are neither income nor expenditure, but are portions of Earnings, set aside for distribution. This tabulation is of fundamental importance; for even with other details lacking, it will at least tell the Earnings story.

But certain supplementary facts are essential to intelligent control. They are those given on the statement against the titles:

Profit over Direct Cost
Profit from Operation
Net Earnings
Current Operating Surplus

In the presence of the figures included in the illustrative statement, it is needless to explain how each of these supplementary facts is determined. It is, however, well to define briefly the meaning intended for each title.

Profit over Direct Costs is the difference between the money value realized from sale of product, and the money value of capital that has been converted into and sold as product. It represents the part of income that is left after provision has been made for the replacement of capital expended as direct costs. Out of it must be met all the expenditure for activities supplementary to creation of product; and from it likewise must reserves be set aside for the replenishment of such capital depletion as has taken place during the income period.

Profit from Operation represents the residue from income that remains after all provision has been made to cover expenditure for direct and supplementary activities associated immediately with the creation of product. It is a major index to the degree of executive control, in that it tells for all utilities created and sold, the comparative value of all utilities expended.

Net Earnings represent the value in money of the net contribution which the enterprise has made to the economic wealth of its shareholders and of humanity as a whole. They comprise profit from operation plus or minus such additions to or deductions from capital values as are not normally attributable to the activities of product creation.

Current Operating Surplus is the residue left from Net Earnings after provision has been made for the claims upon earnings that may be exercised by governments or by shareholders. It represents the true increase or decrease in investment value that has resulted from the changes in capital values that have taken place during the income period.

VI

For the purpose of intelligent comparison of facts, the figures of the Operating Statement should be prepared in a manner to show the sequence of condition from month to month. The important fact is the accumulated story of what has taken place from the beginning of the period to the date of the statement presented. For that reason the figures for the "Period to Date" are first assembled. Parallel to those facts comparative figures as at the "End of Last Month" are to be shown; and as a deduction of the latter from the former, a new tabulation of facts for the "Month Just

Closed" may be prepared. It is not uncommon to find that emphasis is given to the statement of facts for the single month, to the sacrifice or entire disregard of comparative facts for the entire period of which that month is a part. Better is it that the complete period be given first consideration, in order that the effect of violent capital fluctuations that may occur within any short period, may be judged more truly in the light of continued operation.

Supplementing the figures of income and expenditure for the various periods considered, there are arranged on the Statement certain facts under the heading "Per Cent of Sales." These figures tell the number of cents, for each dollar of Sales Invoiced, that has been expended for the purpose indicated by the several figures, or that has been realized as earnings, distributed as profits, or carried to Investment as surplus.

As further information, there are given for the entire period and for the month just closed, certain facts headed "Turnover." Those figures represent the percentage of total working capital that has been expended for the purposes indicated.

Both supplementary groups of fact are of such contributing worth to the problem of executive study as always to merit presentation in parallel to the figures of operation.

During study of the facts told by an operating statement, the executive must reflect constantly upon the condition that his enterprise is primarily a thing of economics, in function, in method, in objective. It is, of course, to be assumed that its product, or—to speak more exactly—the utilities created, are desired by humanity. If the desire is great and the supply meager, out of the economic law of supply and demand comes the reaction that the money value which humanity gives to each unit of product is relatively high. But as supply and desire approach a common meeting point, mankind decreases its valuation in money of the product unit.

VII

Product is known and exchanged in units, each unit representing a given measure of the utilities created. For purposes of establishing price or of studying the causes for gain or loss, the value in money of utilities expended must be apportioned to product according to the product unit. This requirement has developed a supplementary system of intelligence known as Cost Accounting. Unfortunately, however, the emphasis that industry has given to matters of cost accounting, has to an extent distorted the telling of the complete story of operation. Cost Accounting is needful; but it should be carried on as a statistical supplement to the economic tale.

It is not an infrequent thought that unit costs as discovered by the cost accounting system, are the developing causes for the figures that appear upon the Operating Statement. Rather are they the resulting effects of things that those figures portray. It is not that cost per unit influences economic accomplishment, but emphatically the opposite. Economic accomplishment dictates unit cost.

From the practice of determining gross cost of sales through a multiplication of cost per unit by quantity of units sold, there tends to persist in the mind a misconception of the relationship between operation and earnings. It is best, therefore, to carry on the activities of cost accounting as a supplement to the preparation of the Operating Statement—a statistical endeavor that must be ordained for the purpose of telling the effect of

economic achievement upon the cost and earnings value of each product unit. By such distinction, policies of allocation of values to direct cost and overhead can be constructively handled, but yet without interfering in the correct delineation of economic condition. The Operating Statement must tell *fact—economic fact*—and must avoid all prejudice as to principles of overhead distribution, method of cost accumulation, or any other of the secondary problems of accounting.

The purpose of the cost system is to analyze into detail by units of product, the economic facts assembled to the Operating Statement. A *cost*, it may be defined, is the value in money per unit of product of the utilities absorbed by or expended for the creation of that unit. Variations in human desire for any utility may cause wide divergence between the money value accorded it at one geographical location, and the value accorded at another. Attempts at establishing uniform costs between points widely separated must, therefore, take cognizance of this variation and of location of enterprise. Utilities of form, of time, of place, and of possession—the four great groups into which all capital goods may be distributed—must ever be considered.

Even so, therefore, does the fact become evident that industry is a thing of economics, to the very least of its activities. A statement of industrial results can be true only by virtue of an intelligence system whose entire motif is economic. Money must be known as the medium of valuation. Conversion of value must be distinguished from expenditure; and the conditions under which all values reach to the point of expenditure must carefully be determined. Probably the most neglected conceptions of all industrial activity are those to the effect that:

Expenditure means *capital shrinkage*
Income denotes *capital accumulation*

Excess of the former over the latter tends toward disintegration. The converse brings success. But those conceptions must be had of the enterprise in its entirety, and not for but a single unit of its product or division of its activity. Loss or gain at one point *may* mean respective gain or loss at another.

Success or failure for the whole; that is the fact for first determination; and the telling of it becomes the purpose of the Operating Statement.

THE FINANCIAL SITUATION

BY H. PARKER WILLIS *

BUSINESS and financial progress during the month of October has continued substantially along the lines which had already begun to make themselves manifest in preceding weeks. From the standpoint of the securities market, the past month has, however, afforded confirmation of the opinions previously expressed regarding trends of value. Quotations have made but little advance in more than a few lines, whereas in some, decisive reaction has occurred, with the result that values are now lower than they were at the beginning of the month.

II

Business Active and Improving. This reaction on the part of the financial markets, no matter whether temporary or of a more permanent nature, has at all events no basis in the general business situation. Recovery from the strike and its effects has proceeded steadily, and the volume of business is now higher than at any time during the year. Support for this opinion is afforded by a number of facts. Among such facts is the decided increase of production indexes which show that a larger volume of actual units of goods is being turned out than at any time heretofore. Special activity has naturally been observed in coal where energetic effort is being made to offset the idleness of earlier months. Carloadings are also very much higher than in the same period a year ago as shown by a figure of 998,000 for the week ending September 30 as against a figure of 814,000 a year earlier and 992,000 in 1920. These indications should be taken with some reservation, because of the natural increase in activity which has resulted from actual coal shortage. The superficial conclusion which they afford is, however, confirmed by many other contributory items of evidence. The proportion of steel plant capacity now occupied is believed to run from 65 to 75 per cent with an average of 70 per cent while shipments of steel have been proceeding in very satisfactory proportion. On the other hand, the activity in building is still very great and there is but little sign of a slackening such as had been predicted in some quarters. The demand for copper and the consumption of cotton maintain high levels of activity and there is apparent evidence of continuous and healthy demand in many branches of business.

III

Tendency of Prices. In these circumstances, a moderate increase of prices would perhaps be natural. There was a temporary check to the advance which had carried the wholesale price level up 12 per cent between January and August, figures for August and July remaining essentially identical. For September a distinct upward movement has been noted especially in staple commodities and this movement has continued fairly steadily during the early part of October although low prices for agricultural products have held combined averages down to about the same general level as before. The tendency of prices is opposed to that of Great Britain where unemployment

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and depression in many trades still prevail and where the movement of values has been downward. Rather different opinions as to the future course of prices are now entertained by experts, some forecasting a period of secondary inflation in which prices will rise very materially, while others assert that such a development is improbable. It is a rather interesting fact that the course of British prices has frequently preceded similar movements in our own country; and that, so far as this is any indication, it would suggest a slight backward movement in our price level.

The relatively low prices for agricultural products have operated strongly to hold down general or average wholesale price levels so that the actual advance in manufactured commodities is not fully reflected in the combined averages which represent the price situation as a whole. Some statisticians express the opinion that a "moderate advance" of general wholesale prices may be expected to occur during the next few months but they estimate the increase at not to exceed 6 to 8 points further. This would represent an advance due to ordinary business activity and would allow but small influence for what is called inflation or lax bank credit, a danger which is apparently expected at this time by comparatively few. On the whole the consensus of opinion favors a limited advance in prices during the autumn.

IV

Strength of Demand. An influence which tends to sustain this kind of forecast is seen in the continued strength of demand which is clearly manifested in indexes showing the sales made by retail stores. These now stand at an average figure several per cent above figures for a year ago taken as a base. They are not as high as they were in the corresponding month two or three years ago before depression had set in, but they are evidently on the up-grade. This is partly the result of extensive increase of employment, partly the outcome of much higher wages, and partly the effect of a better condition of things in the agricultural districts due to advances in the amount realized by farmers.

There is also a corresponding increase in wholesale trade, paralleling roughly the advance in retail trade, and indicating stronger demand on the part of distributors who are now finding their stocks considerably reduced as compared with former years. A more active consumption has tended to reduce supplies, but it is also true that a good deal of accumulation which was on hand at the beginning of the period of depression has been worked off, with the result that retailers now find it necessary to "stock up" more fully, in order to restore the necessary equipment of their business, as well as to meet increasing current purchases on the part of the public. This is a condition in which prices, while tending upward are likely to be rather more sensitive to factors affecting them from the cost of production side and may therefore be expected to move more closely in harmony with changes in raw materials. In most lines it would seem that the retail and wholesale trade position is working towards a rather higher level of values.

V

Position of Securities Market. With the domestic trade situation in a healthy condition generally speaking, it would seem that stocks and bonds should experience a better demand from the public at large and should on

the whole move toward higher levels. This might be true were it not that during the period of less active commercial operations a considerable amount of funds had been invested in stocks and bonds, so that the market had already anticipated expected favorable business conditions to a considerable extent. A few elements in this general situation have become much more obvious during the past month and deserve to be stated. It has become plain that the volume of bank loans made for the purpose of "carrying" securities in the stock market has reached rather abnormal proportions, going above the previous high peak which had been touched in the autumn of 1920. Some have estimated the total of these loans, at the top point, as $2,000,000,000, others as rather less than that, but all agree that a record level has been touched. In such circumstances it has been out of the question to expect the public to buy much more extensively until the development of savings permits real investment, as against speculation, to occur on a larger scale. On the other hand, banks which, finding their funds idle during the depressed period had bought Liberty and other bonds, are now disposing of their holdings in part with the result that the securities thus thrown upon the market are tending to depress prices there. All this confirms the opinion expressed in former months that the market had gone about as high as it was likely to go in the absence of distinctly new business conditions tending to warrant a further upward movement as a result of real earnings. *The Wall Street Journal* bond index for September shows a figure of 77.47 as compared with the corresponding index of 76.80 for a month earlier and 60.74 a year earlier. As previously indicated, however, there is nothing in this situation to prevent decisive speculative advances in individual securities. Some illustrations of this fact have been afforded by the noteworthy rise in the various Standard Oil and other shares due to the declaration of large stock dividends, running from 100 to 400 per cent by several of the companies, and resulting in rapid and extensive advances either previous, or subsequent to, the announcement.

VI

Earnings Moderate. In most lines, however, earnings are still moderate and accordingly do not warrant bonanza expectations. This is conspicuously true in the railroad group of stocks. Their latest announced earnings amounting to 2.65 per cent on Class I roads for August cannot be taken as a precise criterion of current conditions because they refer to a period during or just after the strike when the roads were most strongly feeling the higher expenses resulting from the struggle. General analysis of conditions on the roads and comparison of totalized earnings since the beginning of the year, however, show clearly that while the roads will do better than expected, they are still on a very moderate basis of average income. And, moreover, they are unable to reach the level of return set by the Transportation Act as representative of normal.

In industrial enterprises, the situation is not very different although the level of earnings is of course higher than among the rails. But there is still a good deal of adjustment to be done as between prices and costs of production due to the fact that the recent wage advances again tend to throw out of gear the level of retail and wholesale charges, while there are other elements in cost that are far from having reached stability. Taking the productive field

as a whole therefore, it is yet to be ascertained how widely the new business activity that is in progress will actually result in bringing about net improvement in earnings in an amount sufficient to warrant considerable advance in stock values.

VII

Foreign Trade Unsatisfactory. One factor which tends strongly toward a pessimistic point of view in this regard is the poor outlook for foreign trade. The collapse of the mark which has now carried its quotation down on some days well below \$.00025, has naturally impressed holders of marks and of mark securities with the belief that their "investment" has been lost. Sympathetically, other investors in securities which are stated in foreign currencies generally have been inclined to discouragement. This attitude on their part is, in the last analysis, based upon the fact that unless foreign countries can export largely to the United States they cannot buy largely here. When it is noted, therefore, that our foreign trade at the present time is still declining, the excess of exports over imports (having probably disappeared in September, according to preliminary government figures), there is good warrant for the feeling that foreigners are likely to find trouble in meeting obligations here and in buying heavily of our products. The decline in exports of some staples such as wheat has at times been noteworthy and the effect of this state of things in all those branches of business in which we have a normal export capacity is naturally to depress prices and to keep down the quotations of securities issued by concerns that depend in any material degree upon foreign demand in order to dispose of their product. How far this situation will develop is yet to be seen, but it is already apparent that the effect of the new tariff is likely to be that of accentuating it.

VIII

Money Outlook Favorable. Working in the other direction and tending to assist in the maintenance of securities values is the fact that money continues relatively cheap and abundant though at times going as high as 6 per cent for call. The rate is somewhat higher than during the summer and general opinion favors a further increase in it which now seems probable. It is still reasonably low as compared with former years and there is abundance of lending power for all legitimate investment and commercial demands. A prevailing rate of 4½ to 5 per cent or 5½ per cent for call funds and 4¼ to 4¾ per cent for good commercial names is not unduly high, and while it is sufficiently pronounced to avoid undue stimulus to speculation the market would probably be better off if the charge were even slightly higher than this figure. The money outlook, from the standpoint of volume available, is, of course, unusually satisfactory. The federal reserve banks have increased their gold stocks still further and their reserve ratio has varied from about 80 to nearly 4 or 5 points below that.

Among member banks—the rank and file of the commercial banks of the country—there has been a moderate increase in loans which has advanced them something over \$100,000,000 in the past few weeks, while this growth of commercial demand has been reflected in a limited increase in federal reserve bill holdings, which has carried that item to about \$768,000,000 on October 8 an increase above low point of perhaps \$250,000,000 or some 50 per cent. This, however, is a small

absolute growth when considered as an index of increasing demand and it remains true that most of the larger banks are in position to carry much more business than they have, and desire to get it when they can do so with safety and conservatism. The ratio of the federal reserve system is well abnormally high. There are few institutions that are anything like "loaned up" the country over. Of course this state of things tends to ward off undue depressions in securities since there is no reason why owners should throw their holdings overboard in order to obtain needed funds. They can easily obtain accommodation on collateral loans from the banks.

IX

Government Financing. The important government financing which was projected by the Treasury Department soon after the defeat of the soldiers' bonus law has been undertaken and carried through although the amount of bonds offered to the public was smaller than expected. Original plans appear to have contemplated about $1,000,000,000 as the sum to be placed on the market but the final modifications resulted in an offering of half that sum with a surplus allotment based on the victory notes offered in subscription. The final allotment is, however, $763,000,000. Meantime government securities have maintained a very high and satisfactory level. The borrowing power of the Treasury is now fixed by the new issue at 4¼ per cent on a long-term issue. Although such an issue naturally tended to cut the value of Liberty bonds in the market the reaction was comparatively small and federal securities of all issues have maintained themselves well.

Definite information of a deficit for the current year likely to amount to $650,000,000 already made known a month ago has, of course, been an unfavorable factor, and there is nothing to modify the belief of Treasury experts heretofore expressed on that score. Indeed there is some reason to think that the deficit may run to larger rather than to smaller figures. New taxation is practically out of the question for the present and a year of deficit financiering therefore seems to be in prospect. This naturally impairs public credit to a minor extent although it is recognized that Congress could if politically able to do so, raise the amount needed to make the budget balance. The outcome of the special session of Congress which is now expected will determine whether a ship subsidy bill is to be passed and will thereby throw light on the probable trend of budget conditions.

X

Foreign Debt Relations. The situation in our foreign debt policy has come to have a considerably greater significance in its bearing upon national financing and domestic security prices during the past month. It has become apparent that the efforts of the World War Debt Funding Commission cannot be successful save as to Great Britain—which country has paid $50,000,000 of interest on October 16—and that hopes for collections from other countries must be deferred. A declaration of policy on the part of the American Bankers' Association in favor of a more liberal attitude looking to possible debt cancellation had not been expected but has had an important effect on financial opinion. General admission that we must either wait a long time for even the collection of interest on the bulk of our claims or else must change our tariff and other policies has unquestionably given a new

trend to the situation. It has also, on the whole, served as a factor tending to depress exchange quotations, and reaction has been the order of the day in nearly all European currencies. This, of course, tends to hurt all foreign securities in greater or less degree, no matter whether payable in dollars or in foreign units of money. The result is unfavorable to new flotations in this market and a number of large ones which had been contemplated are accordingly being held back.

XI

Conclusion. The general outlook for domestic business continues unimpaired and promises a hopeful and prosperous autumn season. Strike menaces have been removed and business progress correspondingly assured. Strong demand exists for nearly all classes of goods, the only qualification being seen in connection with our foreign trade whose development is retarded as a result of our own policies. Securities conditions are in the main sound notwithstanding a rather unduly large loan account carried on stock market collateral. Present indications do not warrant much advance either in stocks or bonds, due to the fact that present levels of values have pretty well anticipated the more prosperous business conditions. Commodity prices are tending upward due to a strong demand for goods and active wholesale and retail trade, but there are thus far comparatively few positive signs of banking inflation. Bank loans have increased moderately, but not more than appears to be warranted by the growth of trade and business. The farmer in many parts of the country is realizing less for his products than he should, largely due to unfavorable foreign conditions. Nevertheless he is in a better position than heretofore and is exerting a considerable demand for consumable commodities and for materials. The weak spot in the situation continues to be found in our relation to foreign countries partly due to the tariff and partly to the progressive deterioration in the financial outlook abroad. Financial opinion favors a more postive foreign policy.

EDITORIAL REVIEW

SCIENTIFIC MANAGEMENT OF BUSINESS FINANCE

The ordinary business is started with cash and its various operations and activities are conducted with the hope of eventually realizing more cash, the increment representing profits. But meanwhile this cash is the most elusive of business tangibles. It goes out on flying feet. It comes back—if it comes back at all—with snail-like deliberation. All through the cycle from cash back to cash again, it exhibits a constant tendency to fall by the wayside and disappear. There are a thousand ways in which it may be locked up or lost, and the most careful management is required to complete the cycle with a fair margin of profit. Yet while all this is true the administration of finance receives less trained intelligence and is perhaps less understood than any other major factor of business success.

Many books have been written on the subject of production—so many that a complete "works library" must needs be a large one. Magazines devoted to the subject are numerous—while purchasing agents, production managers, industrial engineers, technical experts, cost accountants, planning boards, schedules and elaborate organizations and routine are all combined in the successful operation of any sizable and well-managed plant. In like manner the most careful study is given to the subject of distribution. Books and magazines on the subject, sales managers, sales plans, dealers' helps and the many other things that go to make up scientific sales-management are a part of the routine of every well-conducted selling organization.

When, however, we come to business administration, trained experts and scientific study are not often found, and when we come to financial administration, most important of all administrative functions we find no experts, or so few as to emphasize their absence. Practically, the financial management of business is in the same rule of thumb condition that it was forty years ago. Usually the management of a company's finances is left to the native intelligence of the treasurer, or comptroller, or whoever may happen to be in charge. Perhaps the "old man" retains direct financial control and if so, his management is apt to be shrewd and careful, at least. He has had a training in the school of experience.

* * *

Bradstreet's report that 32.1 per cent of the business failures of the country for 1921 was due to bad management. How much of this was financial mismanagement is not stated. A further 29.3 per cent, however, was due to lack of adequate capital. But is this not merely another name for mismanaged capital? It is obvious that capital entirely sufficient in the hands of an experienced and able manager of finances might be entirely inadequate in the hands of an inexperienced or careless manager.

Mismanagement of finances may take many forms. Too much may perhaps be spent on plant and equipment, leaving not enough for working capital. Or it may be that too heavy a stock is purchased and the bills fall due before cash to meet them is in hand, or too much may have been sold on credit and cash cannot be collected in time to meet maturing obligations. Or, in financing on a larger scale, short-term notes may have been issued when long-

term bonds should have been sold, or a thousand things may occur to prevent cash being there when cash is needed, and the result is disaster.

* * *

In some cases, of course, success can be and is attained without financial training. In some cases it is attained without any business training at all. It will not, however, be doubted by anyone familiar with the conditions that—other things being equal—the man skilled in financial matters will succeed more rapidly and more largely than he who is without such skill.

The International Harvester Company in its statement for 1921 reported a loss of $20,000,000 avoided by scientific inventory pricing. The Goodyear Tire and Rubber Company with a surplus of over $33,000,000 at the beginning of 1920 finished the year with a deficit of over $15,000,000, and underwent a drastic reorganization, while the B. F. Goodrich Company under practically similar conditions, save that it enjoyed the guidance of more experienced financiers, came through the same distressful period with heavy losses it is true, but solvent and undisturbed in its organization.

One of the large drug houses of the country recently sent out a congratulatory circular announcing its retrieved fortunes. Accounting for the situation that required retrieving the circular states:

> It was in February 1915, that we found ourselves almost hopelessly involved financially. By reason of large and unfortunate outside investments a serious condition had been created that left but little, save a remarkable prestige.

But why should funds so badly needed in the business have been invested in outside securities at all? Or if these funds were not needed in the business at the time the "outside investments" were made, why were they not turned over to the stockholders in the form of dividends? Or if a security reserve were deemed necessary why was it not so invested and so safeguarded that loss was practically impossible? The managers of the business may have been judges of drugs but obviously they were not judges of outside investments, nor of the proprieties that should govern the disposal of business funds.

* * *

But admitting the necessity for financial knowledge and training, how is the inexperienced financial manager to get the training he so greatly needs? The answer is not easy. The school of experience is always open and is the one most commonly patronized. A few schools of business administration are teaching business finance. A singularly unappreciated source of practical information on the management of business finance is to be found in the bankers of the country who are usually more anxious to help the business man than he is willing to be helped. A few, though very few, good books have been published on the subject. And finally, there are sporadic but usually good articles on business finance to be found in the current magazines.

In this direction *Administration* proposes to add its quota in a series of financial articles covering business finance in its various aspects. These articles written by those who have made a study of the subject—or who have graduated from the aforementioned school of experience—will, it is hoped, be of value not only for the direct information contained, but also by calling attention to the importance of this subject and its neglected condition, helping to create interest and an adequate literature.

WHERE THE BANKERS STAND

AT the recent annual convention of the American Bankers' Association, composed of upwards of 11,000 delegates and guests coming from every part of the United States and representing every legitimate type of financial institution, noteworthy addresses were made by Thomas B. McAdams, President of the Association, Thomas W. Lamont, Reginald McKenna, and others. These speakers stressed the critical situation now existing in Europe, and the necessity for some action by this country to relieve the situation and help rehabilitate our neighbors across the water. In approval of this position the resolutions given below were adopted by the Association. It is to be noted that its action was not based on either sentiment or on philanthropy, but solely on economic considerations and the requirements of business in this country.

The Foreign Situation

We call attention again to the seriousness of the foreign situation, especially of Europe, which is affecting detrimentally our own conditions and preventing even those industries in our country which are not dependent upon foreign trade from recovering fully from the depression which otherwise would be rapidly disappearing.

There is no possibility of a healthy and normal situation in this country until the nations with whom we trade are able to pay us for what they import. As this can be done in the main only by the means of exports to us, we trust that the president will not hesitate to make use of the power granted him by the new tariff law to make such adjustments in the schedules as may be necessary from time to time for a restoration of our international commerce.

We believe that the time has come for the government of our country to formulate the principles on which it will be able to co-operate with other nations to bring about the needed rehabilitation of European countries and peace in the world.

Bankers are accustomed to take the creditor's viewpoint, and our nation having become the principal creditor nation of the world, bankers are naturally among the first to recognize the effect of the new situation on our policy. To collect our obligations, or pending that, to get the interest paid, it is vital that the debtor nations should be busy and prosperous. Our bankers say truly—"There is no possibility of a healthy and normal situation in this country until the nations with whom we trade are able to pay us for what they import," and they ask the President to use his power to modify the schedules so as to effect "a restoration of our international commerce."

It is profoundly significant when a convention of bankers, the most conservative class in the country and the country's financial leaders, deliberately place themselves on record as opposed to the legislation of the dominant political party—a party which most of them voted into national control.

That party still stands for a policy of national isolation. The bankers ask that we "be able to co-operate with other nations." That party by a high tariff would hinder international commerce in order to build up our less profitable industries. The bankers ask the president to mitigate this to the extent of his power. Whether he does so or not, the importance of this public expression of opinion is not lessened. It shows the independence and international broadmindedness of the financial thinkers of the country—the larger economic grasp of the present situation by the business men of the country as contrasted with its politicians.

* * *

Another resolution adopted by the Association reads as follows:

It is our belief that in those industries whose continued operation is essential to

the well-being of the whole people, organized strikes should be regarded as against the welfare of the State. We make a sharp distinction, between the right of the worker to leave his employment and the attempts made by intimidation to compel those employees to leave their posts, who otherwise would be willing to work.

This is closely in line with the resolution adopted at the closing session of the American Mining Congress. As reported in *The New York Times* of October 14, this declared that:

> . . . laws should be made and enforced by all the powers of the government that shall forever strip labor organizations as well as employers of the ability to interfere with the production and distribution of the necessaries of life.

In the course of an address at the annual dinner of the Mining Congress just referred to, Elisha J. Lee, Vice-President of the Pennsylvania lines likewise declared that railroad labor must surrender the strike "if the rights of the people to uninterrupted transportation service are to be permanently secured." But, and here speaks the "man in the field" who sees the thing that must be done but also sees the practical difficulties of its accomplishment:

> I am not prepared to say, at the present time, that we should go to the length of absolutely forbidding railroad strikes by specific statutes. Nor would I attempt otherwise to lay down any particular method by which acceptance of this basically correct principle may be brought about.
>
> I am only sure of one thing, and that is that it must be accomplished in some way if the railroad labor situation is to be stabilized.

* * *

Along even more fundamental lines the Bankers' Association adopted the following resolution:

> We pledge our support to the incoming president of the American Bankers' Association in the campaign to teach sound thinking along economic lines. We regard such education as necessary for the safety of our great democracy. We believe that the universities, colleges, and other educational institutions of this country should co-operate to further this work.

The importance of such a campaign can be the better appreciated when we hear Henry Ford suggested for the presidency of the United States because of his views upon the money question, and see our national legislators—ignoring the fact that we are a creditor nation—barring from our doors by high tariff impositions the very imports that would pay these debts.

Job Hedges suggests that an intellectual budget in Washington would be a good thing. Doubtless it would serve a useful purpose, but perhaps General Dawes, formerly Director of the Budget, came nearer the root of the trouble at Washington, when he made the following statement in the course of a recent address:

> The trouble is the cowardice in Congress; men in office who would barter the interests of their country in order to stay in office, and if there is any organized opposition they run. Look at the way they ran before the organized minorities of the soldier bonus bloc, the farm bloc, the labor bloc, the maternity bloc, the good roads bloc.

The only remedy for such a condition is the education of the people in "sound thinking along economic lines." When the people of the country, or a fair proportion of them, demand sane, economically sound legislation they will get it. As our government is at present constituted they cannot get it otherwise.

BOOK REVIEWS

THE LITERATURE OF BUSINESS

Selected and Edited by Alta Gwinn Saunders, Instructor in Business English in the University of Illinois; and Herbert LeSourd Creek, Professor of English in Purdue University. xvi, 513 pp. Harper and Brothers

REVIEWED BY STEWART T. BEACH*

The editors of "The Literature of Business" have divided their work into two parts, commensurate with their expressed objective, giving to the public in an easily accessible form the requirements for the successful writing of business English. As a matter of fact, the range of subject matter covered is far greater than that announced in the introduction. Only the latter part deals directly with the actual writing of those sales-letters to which so many texts have been devoted of late. Part one covers a broader field—it attempts to show the perspective necessary to a man who wishes to write appeals which will really "pull" sales and widen the reach of his particular house in the business world.

The book fails to follow the lines usually assigned to commercial texts. Instead of the often dry dogmatizing of writers on these subjects, the editors have followed a plan of collecting and editing articles and addresses, the work of men who are experts in their respective lines of endeavor. A glance over the table of contents, containing the names of such men as Charles M. Schwab, Frank A. Vanderlip, John Ruskin, Theodore Roosevelt, John D. Rockefeller, Jr., John D. Rockefeller, Edward Bok, Robert Louis Stevenson, and many others—the list is too long to be quoted in full—will serve to demonstrate the range of thought and wealth of advice and information brought together between the covers of the book.

The editors have carefully selected their articles, and in arranging them have made use of an excellent system of grouping, designed to classify and organize the material into set channels. The complete edition, while certainly offering inspiration to students of the commercial branches of study, presents primarily, information which should be of inestimable value to executives.

Part one is properly entitled "The Profession of Business" and it follows naturally that the first subhead should concern itself with the matter of education. The much-discussed question of the college graduate's general fitness for industry endeavor is taken up by Charles M. Schwab, and his remarks might be read with profit by all. Their pithiness is undeniable, as is the fact that they avoid empty rhetoric and strike at the heart of the matter.

Mr. Schwab says:

> A college man, entering industry, is worth no more to his employer than a common-school or high-school boy unless he happens to be taking up some position in which higher education is directly applied. Even then he has to adjust himself. . . . Higher education has its chance later when the college boy has mastered all the minor details of the business. Then, if he went to college with serious purpose and studied hard and systematically, he has the advantage of a thoroughly trained mind to tackle the larger problems, a mind which should be broader and more flexible because of its greater powers of imagination and logical reasoning.

Mr. Schwab deplores the inflated idea which many college-bred men have of their own importance and points out that the value of higher education lies largely in the capacity which a certain amount of hard, systematic study has given the boy, in fitting him to cope with the problems which his business will naturally present.

The trend of the articles follows a regular course through a discussion of the ethics of business and the necessary knowl-

* Book Reviewer for *The Literary Review*, etc., New York City.

edge of psychology requisite for an understanding of fundamental problems. John D. Rockefeller, Jr., has some very interesting things to say upon the "Personal Relation to Industry." Starting from a basic consideration of the yearly cost of strikes, the natural outgrowth of mutual distrust between capital and labor, Mr. Rockefeller points out these two things, basing his argument upon the fact that strikes are as harmful to one side as to the other:

> The first is that labor and capital are naturally partners, not enemies. The second, that the personal relation in industry entered into in the right spirit gives the greatest promise of bridging the yawning chasm which has opened up between employer and employee.

His remarks are particularly apropos in view of the recent strikes which have torn our country's economic security. The experiences which he relates in connection with a really successful attempt made in a Colorado coal mine to secure amicable relations for the employers with their men might be read with profit by executives.

An excerpt from the "Random Reminiscences" of John D. Rockefeller is equally interesting. The editors have selected the part which is the most inspirational to those who have difficulty in organizing their business affairs. In it, Mr. Rockefeller points out that he owes all the success which he has achieved, not only to his indefatigible energy, but to his desire to account for even the most minute expenditures exactly.

A few pages from "Obvious Adams," Robert R. Updegraff's most interesting account of the young man who won his success in the world by doing what other people never thought of doing—the "obvious" thing—conclude the first part of the book. "Obvious Adams," which, since its original appearance in *The Saturday Evening Post,* has been published in book form, is one of the freshest, keenest accounts of unusual success ever written.

In part two, the actual matter of writing the business letter together with its related principles such as claims and adjustments, credits and collections, applications and positions is discussed. Again excellent judgment has been used by the editors and the list which they present seems to have culled from the whole library of business literature, an anthology of the best articles which have been written. The matter is taken up generally from the angle of the part which good letters play in adjusting the difficulties and problems of the executive, showing the employee, at the same time, the value of writing good letters in securing good positions and holding them.

The real matter of writing sales-letters is taken up by J. H. Picken who is sufficiently well-known as an authority on the psychology of salesmanship to make his statements more than valuable. He takes up the question of the sales-letter from the standpoint of absolute rules, and answers the question, "Are there rules for writing a sales-letter?"

> The study of forty million pieces shows that sales-literature, when it is written in accordance with rules, is invariably more effective than when it ignores them or fails to take them properly into account. The same is true of collection and adjustment letters, and very largely of advertising in general, for after all these are only specialized forms of sales-literature. It does not follow, however, that sales-literature written even with expert application of these principles of correspondence will invariably be successful. The most that can be said for such literature is that it has a good fighting chance. Under normal conditions, and to well-chosen trade prospects, it will succeed. Under adverse conditions, such as the outbreak of war or any more or less transient social excitement, failure may result.

"The Literature of Business," in the last analysis, transcends its original purpose. It starts as a guide to good business letter-writing and it ends by containing a most complete collection of articles, written by experts in their respective fields, on many of the most vital problems of business. Valuable for the young man in familiarizing him with some of the questions which it will be his task to solve in the future, it is doubly valuable to the executive who has already been confronted by cases in which matter in the collection might have been of assistance.

THE IRON MAN IN INDUSTRY

By Arthur Pound. xiv, 230 pp. Atlantic Press

REVIEWED BY MALCOLM KEIR*

The late Professor Patten of the University of Pennsylvania used to command that a student take no more than one of his courses in a year because he said he had only one story to tell, and told it under different labels in his different courses. It is equally difficult for a reviewer to appraise the same book for two different magazines and be original and fair in both articles. Recently it was my privilege to review Mr. Pound's book for *The Atlantic Monthly.* This, the second study of the same work, therefore repeats much that was said in the first, but modified to the more technical audience of *Administration.*

The Iron Man—as Mr. Pound calls the automatic machine—has been amazingly matured in the automobile factories at Flint, Michigan, the city where Mr. Pound has been engaged in newspaper work for a number of years. Watching the Iron Man turn a village into a city and a state into a workshop, Mr. Pound has tried to visualize the social signifiance of the automatic machine to the masses. The thought stimulated by an environment dominated by the Iron Man is crystallized in this book.

The old bar to easy entrance into the skilled trades of the city, the apprenticeship necessary to skill in a craft, has been broken by the automatic machine whose operation can be learned in a few hours or days. This fact, as Mr. Pound shows, makes a transition from country to city work simple, and gives rise to a constant shifting of population in response to the flow and ebb of industrial tides. Furthermore, by eliminating the requirements of skill, the Iron Man tends to level all wages, first among factory workers, then among office forces, and finally in all society. The machine thus becomes potent in the realization of the socialist's dream of equalized incomes.

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But the new machinery fails to satisfy the minds of workers, since it calls for monotonous, standardized, repetitive operation without variety and with no incitement to intellectual curiosity or mental ingenuity. Two results follow. On the one hand, the hours of work must be reduced and the leisure time spent in furnishing the mind with the activities it craves. As a consequence of the latter, young people must be educated to use their leisure beneficially by guidance away from obsolete vocational training toward the artistic, the ethical, the philosophical, the literary, and the religious. On the other hand, without properly spent leisure the Iron Man will lead to lowered mentality, the employment of the subnormal, the survival of the unfit, and the final submergence of our Western white civilization.

Inasmuch as the automatic machine is peculiarly affiliated with the corporate form of business, it is necessary to reason about the relationship of the corporation to the state, as well as to consider how men may be trained as executives who shall manage these corporations in such a way as to make them of most social good, and most democratic in their relation with their employees.

This is a book that challenges attention. It ought not to be read in a hurry, but thoughtfully. Nearly every page gives material for much deliberation. Yet, unlike most such books, the *Iron Man* is readable; the author has an easy humorous style, and is especially gifted in the use of unusual figures of speech. A wide audience may be predicted for it.

Nevertheless, this review would be incomplete if the reviewer should fail to indicate his feeling that Mr. Pound has committed a logical fallacy by assuming a whole from a part, and making a generalization from a particular. Automatic machinery is not now, nor is it likely to be, universal in American manufacturing in-

dustry. It happens that the automobile industry, with which Mr. Pound has been most intimately associated, is the outstanding example in the use of the Iron Man. But some of our important industries are still in the hand stage. For example, sanitary pottery is almost entirely a hand-made product. Every gradation from this primitive condition to the automatically produced automobile is discoverable in our American workshops. As a matter of fact, only a few industries have reached the ultimate goal where nearly all equipment is automatically operated. The automobile industry, some parts of the textile, and iron and steel manufacture are about the only industries that exemplify to a high degree the features that Mr. Pound's thesis assumes to be universal.

Moreover, automatic machinery can never be completely universal in industry because new industries are constantly appearing. It is a characteristic of most new industries that they begin with equipment that requires considerable hand or brain skill to operate. It takes time—even in the automobile industry it has taken 25 years—for new industries to reach mechanical perfection. New industries, consequently, will always furnish stragglers in the industrial procession. As a result the premise of universality of Iron Men upon which Mr. Pound proceeds to reason leads to exaggeration.

The book serves a useful purpose, however, in throwing tendencies into high relief, so that one may more accurately judge their import; but one must not be misled into believing that the magnification does not distort the real truth.

Business men, particularly manufacturers, meeting the Iron Man at first hand would do well to read Mr. Pound's book. Such men are likely to view the Iron Man only in his immediate profit-making characteristics. It would be well for them to reflect with Mr. Pound upon the long range effects that the Iron Man is likely to have upon our social order.

THE NEWSPAPERMAN

By Talcott Williams, Director of the Pulitzer School of Journalism. 209 pp. Charles Scribner's Sons

Reviewed by James Melvin Lee*

The newspaper is a peculiar economic product. In fact it is so complex that writers on political economy have completely sidestepped when discussing the press. The publisher of a newspaper markets two things—news and other interesting matter to the reader, and display space to the advertiser. The peculiarity of a newspaper is that the news marketed to the reader and the space sold to the advertiser have to be put into the same container, the white paper on which the news is printed and the advertising displayed.

A book on "The Advertising Man" is reviewed elsewhere in this department by Don C. Seitz, Business Manager of *The New York World*. This review confines itself to comment on a book dealing with the other product sold by the newspaper publisher. Its author, Dr. Talcott Williams of the Pulitzer School of Journalism, describes somewhat in detail the nature of newspaper work; outlines the opportunities for success which the newspaperman may hope to achieve, and points out the satisfaction experienced in such work. The book contains the address which Dr. Williams gave when the Pulitzer School was first opened.

While the book was evidently prepared to aid young men in the choice of a life work, it can be read by executives who want to know more about the editing and making of newspapers. For those interested in the production of newspapers for industrial plants, the book contains many

* Director of the Department of Journalism, New York University, New York City.

helpful suggestions and might well be ordered for the plant library.

Many corporations now have a "counsellor of public relations," commonly spoken of as a "director of publicity." In speaking of this type of work, Dr. Williams says:

> The publicity man addresses himself to his work in the spirit of a lawyer, counsel for a corporation. Exactly as at the bar complaint is justly made that the weight and ability of the legal profession serves corporations, so publicity is diverting from the newspaper the ability of journalism. When the full tide of activities, dulled now in 1921, was in progress in 1919 and 1920, there was hardly a week but saw some conspicuously able newspaperman turn to publicity, just as able lawyers entered corporate service. In some cities leading members of the bar receive annually a retaining fee, whose aggregate in the case of one conspicuous example in Philadelphia in the recent past ran to $200,000, whose real purpose was to prevent this particular counsellor at law from appearing against the corporations paying this dubious tribute.

One of the first lessons which schools of journalism try to teach their students is the importance of accuracy in getting the initials. Consequently it is a little amusing to see Chester S. Lord, so long Managing Editor of *The New York Sun*, frequently mentioned as Chester G. Lord—but this and other typographical slips are picayune matters and detract but little from an excellent book on the opportunities in the newspaper business.

THE ADVERTISING MAN

By Ernest Elmo Calkins. 205 pp. Charles Scribner's Sons

Reviewed by Don C. Seitz*

Advertising may be generally designated as the great art of attracting attention, but in modern business it has become a convenience in advising the public when and where it can be served. There is no magic about it, though many have that view, and of late years seekers after occupation have turned in considerable numbers to acquiring knowledge that will lead to fortune. To these Ernest Elmo Calkins, himself an accomplished worker in the line of publicity, addresses a volume of the "Vocational Series" issued by Charles Scribner's Sons, entitled "The Advertising Man."

This is a very intelligent treatise on the subject, which does not seek to lead anyone into accepting quackery. His book is rather one of experience and example.

He notes the interesting fact that for more than a century and a half, from the days of Addison's "Spectator" to twenty-five years ago, the advertising columns of newspapers were fed mainly by medicine men and charlatans, and is inclined to credit the cleaning-up to the moral efforts of the associated advertising men, who began the war. It would be inferred from his comments that patent medicines are no more! Alas, that is not true. They may have disappeared from their overweening place in the columns of newspapers, but not from the shelves of the apothecary.

The real pressure that has obscured them has grown from the ready response that all America makes to convenience. When merchants began to make wide use of the newspaper and periodical, the response came and is still coming strong. The effort to compel him to see the value of good copy and good space came from the press itself. It seems absurd that a newspaper should have to spend large sums in experiments and persuasion to convince a dealer in wares that he could sell more if he told the public he had them, but this was done for a long time before enough eyes were opened to permit the exclusion of lower grade offerings. The papers had to live and they lived on what was to be procured in the way of business. Instead of reprehending them for harboring the speculator or the

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quack, legitimate business deserves rather to be scored for its dullness and hostility.

Mr. Calkins outlines clearly the various phases of advertising, its opportunities, and its rewards. There is no great field, and only now and then a considerable return for the exceptional. In other words advertising as a profession is like everything else, success depends upon the impulse, talent, and push of the individual.

HUMAN FACTORS IN INDUSTRY

By Harry Tipper. Author of "The New Business," "Discussions of the Labor Question," etc. v, 280 pp. The Ronald Press Company

Reviewed by F. P. Pitzer*

I have before me a handy little volume entitled "Human Factors in Industry." With me the Ronald "blues" is getting to be a pleasant state of mind, for just as one thinks he has read the best issued by this progressive publishing house, along comes another volume "a little better."

In his present book, which is a study of group organization, Harry Tipper leads you through a street which he knows well, and quite different from his "The New Business," and "Discussions of the Labor Question." Fortunately, however, his streets are all in the same town.

The labor problem, covering as it does such a vast field, if all of its phases are considered, would require a good-sized library if a complete analysis was attempted, and even if we corralled all of the books on the subject we would find not only a noticeable lack of co-ordination or continuity of thought but also a diversity of opinion. So one must read a book on industrial humanity not as if it is the authority or last word on the subject, but as a stimulus to formulate individual opinion by actual application as far as possible which must of necessity spur executives to a greater realization of the fact that constant thought and reading is needed if the best results are to be attained in keeping industrial humanity in harmony and in harness.

Textbooks treating of the human element can only grow out of experience and can only tell with a degree of exactitude what has gone on before, for when we begin measuring the future of humanity in industry by any charts or curves, we only hazard guesses. Mr. Tipper's book not only recites what has gone on before but gives historical data in readable text showing the progress of humanization in industry.

Realizing further that to consider all the elements which are involved in a complete study of the labor problem would be impossible in a single volume, an author must put into his book only those things vital to his subject, separating the wheat from the chaff. Harry Tipper has done this in his present volume "Human Factors in Industry" and the Ronald Press Company can feel happy in adding such a helpful volume to its azure list.

Mr. Tipper does not exaggerate in any part of his book. Wherever it is important to deal with the social, educational, or other general aspects of the workers, in order to show the way in which they have affected industry, these matters are taken up briefly and in language quite understandable. Mr. Tipper's cards are on the table always. He makes no attempt to discuss the evidence or make any detailed examination beyond that necessary for the purpose of explaining the present industrial condition. He states, in his preface "For the most part, this work deals with the mental factors of industrial relationships, with organization conditions, and with experiments in changing or modifying organizations." He gives due consideration to the ideas of labor unions and definition of their objects, as well as to the development, brought about by various industrial groups or units, and through the pressure of pub-

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lic opinion. His book is the result of many years of intimate association and observation of industrial conditions in actual work with labor and in the supervision of all kinds of labor Mr. Tipper puts the whole story before us in such a lucid and straight-from-the shoulder style that any student interested in industrial affairs, or the labor unionist, or the level-headed business man who fails to get this book, has a dangerous void in his or her industrial library.

Mr. Tipper has attempted a concise analysis of the difficulties which must be met and the outlook in meeting them. He uses up 21 chapters in which to tell the story and 280 pages of text—good clear type—an alphabetical index completing the volume. The chapters are divided by subheads which break the reading very pleasantly. We pick at random from the table of contents "The Growth and Development of Labor Unions," which treats of early industrial difficulties in a rather historical way, taking up the birth of our present labor union system, telling about the shop stewards, the co-operative societies in Great Britain, and finally union development in the United States, not overlooking the "Industrial Workers of the World" and summing up the present condition in the United States and Great Britain of the trade unionism machinery. While this one chapter takes up 17 pages it is put together in such an interesting manner that one regrets when it is ended.

Another chapter, "Education and Industry," also holds the reader's attention very closely and recites education in earlier times and the limitations of modern education. It tells how in the earlier social organization in which the production was done almost entirely by hand-work, the education and training was supplied to the majority of the population by their work itself. It tells about the general ignorance of economic and social machinery in those days, and the effect of general intelligence on government, requisite for proper government, the extent of progress in education, and a very strong appeal for a closer relationship between home, occupation, and school. What a meaty chapter it is, particularly when we continue and read about inadequate social checks on industrial morals. Then, just as we think we are far ahead of the ancient days, we run up against a few paragraphs dealing with industry's neglect of moral standards which make us sit up and take notice, but we are brought back to a mental balance by reading:

> The Character of industry in the future will be determined by the character of education it gives to its workers, whether this education be organized, or unorganized, and it is not unlikely that the stability of the present type of civilization will depend greatly upon these developments.

There are so many interesting chapters we would like to comment upon, but we do not want to tell you about them for perhaps you "did not see the show" and it would "spoil everything" and "take the joy out of it" if we told you everything beforehand, so we will content ourselves in quoting from Chapter XX which deals with the Industrial Relations Department:

> The first step in the consideration of the human side in industrial affairs was the abandonment of the old "hire and fire" system, and the attempt to investigate the fitness of an applicant, his record and his past experiences, so that a better use could be made of his potential capacity.
>
> To do this it was necessary to investigate, and employment managers came into existence. During the last few years this development has been sufficiently widespread to lead to special courses in some schools for the development of employment managers, so that they would have some particular fitness for their work.
>
> This examination of applicants led to the consideration of training, and educational facilities have been installed in a great many plants for the purpose of training employees to greater proficiency in certain general departments of the companies' activities.
>
> The unrest culminating in the severe troubles during 1919 and 1920 led to the employment of men charged with supervision of industrial relations as a general matter, and a sufficient number of these men have been employed to warrant the forming of a national association with its conventions and usual meetings. It is a little difficult to define the duties and responsibilities of the industrial relations managers, and in many cases where they have been employed the reasons for their employment are very indefinite.
>
> In at least a number of cases where I have talked with industrial relations managers, they

have conceived their duty as one of keeping the employees happy with the least possible expense to the company. In some cases the department has conceived his principal job as a sort of Pinkerton Detective Agency for the management.

The wisdom of employing special men for the operation of the details of industrial relations work is questionable anyway, and if the employment of such a man is supposed to relieve the rest of the executives from thinking about and studying requirements from the human side, the specializing of such work is dangerous.

The only hope of better conditions in the industrial organization is the education of the executives and supervisors, by a continuous exhibition of human sympathy on the part of the management, and a continuous insistence upon human understanding on the part of the subordinate executive.

This education cannot be secured if the industrial relations question is conveniently shelled into a special department and the manager of that department becomes more concerned with the maintenance of his own job than with the solution of the problem. There are very few industrial organizations so wisely constituted and so sympathetically managed that an industrial relations manager could hope to do his work properly without, from time to time, conflicting with the ideas of those who have hired him.

Unless the industrial relations manager is big enough and possessed of sufficient human understanding to sell his employers out of their own prejudices and habits of mind, to accomplish things in spite of existing narrowmindedness, and to secure the confidence of the workers, the job will not accomplish any material results, and the big purpose for which the department has been started will fail for that reason.

There is a grave danger that hasty establishment of industrial relations departments by manufacturing establishments will confuse the issue, instead of leading to a greater measure of agreement and understanding. Behind the industrial unrest is the lack of interest and confidence on the part of the workers and the consequent absence of allegiance; the absence of any incentive and the objectless character of the work. The ability to create confidence, to implant an incentive, and to teach, is not usually secured by special education nor is it to be developed merely by the appointment of a special department.

Where supervisors must be concerned with the details of operations, it is important that they be trained especially in the character and requirements of those operations, but such special education does not improve their capacity to handle men. That capacity is not likely to be improved when the whole subject of human relations is transferred to a special department and the supervisor relieved of his responsibility in the matter.

There is a place in the manufacturing establishment for a department to carry on the organized process of education, to see that grievances are adjusted, and that all necessary changes affecting the interests of the men are properly promoted and understood. Such a department is badly miscalled when it is named an industrial relations department, and a label of that kind may be dangerous, because of its suggestion that responsibility is removed from the other executives.

Even for the purpose of education, the choice of a manager is a very important and somewhat difficult matter. To find a man who knows how to arrange teaching and knows what should be taught, who understands the people who are to be taught, and who at the same time has a large amount of that most uncommon quality, common sense, is not an easy task. If such a man is found, it is not altogether unlikely that his first job would be to educate the management to the things they have not discovered in their acquaintance with the establishment.

Until the managers of the manufacturing establishments are convinced of the deficiencies of the present system, of the necessity for change and justice of the proposed changes, none of the other work will be of much value.

Until the manufacturers realize that the worker has a right to know what becomes of the dollar secured from the customer, that he has a right to know the significance of his work and to discuss his grievances, there is not much use in establishing any industrial relations department.

Those outside of this department must be convinced that the obligation rests upon the manufacturer to understand his workers, their habits of mind, and their necessities, and to take such measures as may be necessary for their orderly co-operation. There is one exception to this case, and that is where the manager of industrial relations himself is versed in and convinced of these matters, and sufficiently wise to see the orderly development of their operation. If in addition to these qualities, he has the strength to convince the manufacturer of the value and importance of the things that must be done, the industrial relations department may improve the organization very greatly and secure the sympathy of all parties by virtue of its own strength.

In other words, the value of an industrial relations manager is about equal to the capacity of the manager as an individual, to the authority which will be given him, and to the practicality of his operations. The really effective organi-

zation to be adopted in an industrial establishment in connection with the labor question is that which provides a bureau of employment, facilities for training, and facilities for general education, under one head. The reason for co-ordinating these under one head is that the knowledge of the individual's record capacities and tests is of great importance in his training, and the composite picture secured from handling these matters is a fundamental operation in the general education.

An examination of the proceedings of some of the conventions of men who have been appointed to industrial relations management does not suggest that many of them understand the importance and definite character of their work, while the method by which a number of them have been chosen for their positions indicates a similar lack of understanding on the part of the manufacturer.

The value of any specialized activity, labeled industrial relations, is doubtful. That subject is too big and too important to be centered in any special department, it is affected too closely by the action of every supervisor for any responsibility to be removed from him in the matter.

Certain operating developments which grow out of it, such as those already stated, can be centered in one department and should be in charge of a special executive, but this man should not be recognized as a separate company activity. His work should be that of a special assistant to the general executive in charge of the manufacturing establishment, and the general executive's contact with him should be intimate and close, as in the case of his other executive assistants.

It is not only that the industrial relations question is big, so big that it frequently goes outside of industry and has its direct bearing upon political methods, but it must be handled, not only with a desire for justice and an understanding of the psychology of labor, but with patient practicality to keep its progress orderly. As one of my deep-thinking friends said to me the other day: "It is not so difficult to see the conditions of final solution, but it is very difficult to determine exactly how the 5 per cent progress towards that solution can be made in this generation with the least disorder."

To find a man who knows what is wrong is not unusual; to find one who knows what ought to be done is somewhat more difficult, but does not require a deep search; but to find a man who knows not only what is wrong and what ought to be done, but how it can be approached, so that there is no radical change and no chaotic interlude, is a very difficult matter indeed.

Industrial departments devoted to better human understanding in manufacturing establishments have come to stay, and in accordance with the personnel of the establishment, they will add their little mite of progress or their little stumbling block in the way of solution. The confidence to be established, the incentive to be created, and the orderly co-operation that must be secured, are matters depending upon the personnel of the whole concern—particularly the attitude of the leaders of the concern. The problems will not be solved alone nor materially advanced by the actions of the special department erected in a number of cases.

In connection with the development of the industrial relations departments, employment bureaus, and so forth, the danger of standardized methods of dealing with the human side of industry is very apparent. This idea of standardization runs through all the discussions that have taken place in the organizations of employment managers, personnel directors, industrial engineers, and the innumerable other societies springing up with the idea of taking care of the human side of the industrial problem.

It is true that there are certain fundamental elements of similarity in human reactions, but the principal possibility of development lies, not in these fundamental similarities, but in the endless individual variation which develops an infinite variety in the quality of action and thought. We do not even know with any certitude the fundamental elements of similarity and what they mean in practical action. We have no understanding of the way in which these fundamental elements govern the endless individual differences, and we are utterly without information as to the potential powers existing in these variously combined qualities.

We have already standardized to such a degree in our attempt to use human beings easily in industry, that standardization has in many cases developed into a dangerous suggestion of uniformity. This standardization has grown up out of the ignorance of fundamental human requirements, and it has been one of the chief elements in the growth of trade unionism and the development of socialism.

All standardized methods of examination of human beings are inefficient to that degree—the most desirable method of selection, like the most desirable method of education, is the one which is individual and arises out of the instinctive capacity to draw the individual out.

This idea of standardization in human relationships is simply another way of attempting to do by system what we have not sufficient knowledge to do by understanding, and the result is likely to be more confusion and more difficulty, because these organizations of various kinds will be limited by the systems they adopt.

It is a sufficiently hard matter to standardize

effectively the technical practice in a business dealing with understood mechanical principles. Every step in the progress of such technical practice demands the elimination of old standards and the readjustment of standards to the new state of knowledge. We are thoroughly well informed regarding mechanical principles, and are able to govern the results with a fair degree of accuracy and with a fair degree of foresight.

Our knowledge of humanity is meager and we have not made any notable progress in this respect in the growth of our mechanical convenience. To attempt to standardize and to classify into systems our present ignorance of human relations, is to assume a knowledge we do not possess, and seriously to impede the possibility of progress.

Equally significant is the number of organizations coming into existence with the sole object of establishing new systems of dealing with the human being. This multiplicity of organizations leads to a great deal of confusion and to the development of a large amount of unnecessary propaganda for this or that method of increasing the efficiency in dealing with the human side.

If these groups were based upon discussion and the gradual illumination of the matter by the definition arising out of the friction of the discussion, there would be some valuable progress in their development. Almost all of them have been formed by people who are not only interested in the subject, but who are also interested in certain systems of development—of which each system, of course, contains the only elements of thorough value in dealing with the situation.

Such organizations have a tendency to establish a terminology and a technique of operations long before they have thoroughly illuminated the principle upon which such a technique should be built. They may be of some value in a limited way, but their constant multiplication is of no advantage and may be a great disadvantage.

No operating technique or system of dealing with the selection or co-operation of workers is of any particular importance at the present time. The co-operation depends largely upon the development of a spirit of fairness among all parties, and the selection depends upon an increase in the measure of understanding on the part of those who must select. Selections must always take place because of the fitness of the individual for the work, in his skill and the quality of his mental development.

The total efficiency of the group is the average of the value of each individual in the group. A thorough understanding of the individual, his skill and his quality, will automatically raise the average possible efficiency of the group, while neglect of the individual, in the attempt to standardize and provide easy systems for mass selection, will merely bring the individual quality to the average upon which the system is based. Practically all of these organizations act as though the individual was no longer the basis of human development, and efficiency was no longer a question of the individual capacity.

The very necessities of our organization have driven us to standardize work and pay, the unions have attempted to make skill a uniform matter, and these things are disturbances enough to our present system of organization. To organize for the purpose of furthering these standardizations and elevating the neglect of the individual into a scientific technique, seems to be a method of improvement by increasing the present difficulties.

This does not mean that study of the human side should be neglected. No man can expect to understand humanity without giving it a great deal of study. The lack of definite knowledge on the subject means, in fact, that this study is more severe and more laborious than any other study in the attempt to acquire definition. The objection to their organization arises from the attempts at systematizing on too little study and too little understanding of the matters with which they are dealing. Their efforts at organization are based upon the most fragmentary and partial examinations of the matter.

The systems are not based upon much more knowledge than the course which undertakes to teach all about handling humanity in six months. In thirty centuries we have not been able to define the framework of fundamental human principles and determine the elements of human co-operation. Under these circumstances, it seems unlikely that organizations can be started after a few months' or a few years' fragmentary study of the question and build up systems of operation that will be of great moment in dealing with the subject.

It would be better, for a time at least, if the systems grew out of the individual methods of operation in each case, and were discussed in the endeavor to find those principles threading through all systems. Some real progress might be made by such discussions and the understanding of the human side greatly forwarded.

It is not standardization we need, but definition. What is a square deal? I have been unable to secure the same definition from any half-dozen men. Most of the time the square deal we talk about is concerned with what the other fellow should do to us, and does not refer very much to what we should do for the other fellow.

I have yet to find a dozen men who can agree upon the term "fair wages." Efficiency, alertness, initiative, and all those other words we use to describe human qualities, lack definition, and their meaning is so vague that no two men translate them into the same actions.

There can be no standardization of effort worth while without a definition of fundamentals so clear that the terminology is thoroughly understood. With the present vague, indefinite, fragmentary ideas of human quality and action, systems based upon such ignorance are not likely to be of any importance and they may be dangerous.

Of course on certain well-known subjects not much new is said under such headings as Incentive, The Worker and the Job, Fatigue, Fitting the Job to the Man, The Wage System, Bonuses and Profit-Sharing, Open Shop, etc., but it is not the kind of bricks in the hod but how they are laid that makes a building attractive. In mechanical make-up the book is excellent.

THE RICARDIAN RENT THEORY IN EARLY AMERICAN ECONOMICS

By John Roscoe Turner, Professor of Economics in New York University. Introduction by Frank Albert Fetter, Professor of Economics in Princeton University. xix, 221 pp. The New York University Press

Reviewed by K. M. Williamson *

It is regrettable that American students have neglected the writings of the early economists of our own country. Professor Turner tells us of this neglect in his recently published study of "The Ricardian Rent Theory in Early American Economics," and Professor Fetter in his introduction to the book points out the same fact. Professor Fetter suggests two reasons for this neglect—"the poor estimate of the learning and equipment of the early American economists in comparison with their English contemporaries," and "the dominance of the Ricardian economics in America, especially after J. S. Mill's work gave it new appeal and a new vogue among American readers." Whatever the explanation, Professor Turner has done a distinct service to present-day readers by bringing to their attention the early American writers in economics.

The book is patently the fruit of graduate study and the author admits frankly that with one exception it is "offered for publication precisely as when completed" while he was a graduate student. It is, therefore, lacking in a certain richness which the author might have given it in later years. The study might well have been extended to cover all of the writings of the early economists rather than practically what was essential to explain their rent theories. We are glad when the author has gone out of his way to give the opinions of some writers on capital, value, and wealth. Though inadequate as such, it is a partial history of early economic doctrines in America, and for this we are distinctly in debt to him. The reader is impressed with the thoroughness with which the research has been conducted through biographies, newspapers, journals, encyclopedias, and musty treatises. The author has evidently read the literature about which he writes and has thus saved himself from the superficiality which sometimes characterizes essays upon previous economic writers. This intensive study has enabled him to clear up some misconceptions concerning our early economists. Despite these very great merits, the book might have been written in a more attractive and interesting style.

The author first introduces us to that early group of national economists of whom Raymond, Alexander Everett, and Willard Phillips were the outstanding figures. They were educated lawyers and professional men, not trained economists, but theirs was the day before the "trained economist." Impressed with the youth and economic capacity of their country, they "combated the gloomy Maltho-Ricardian theory."

* Professor of Economics and Social Science, Wesleyan University, Middletown, Connecticut.

Turner then describes the "Classical School" of economists composed of those early professors who wrote textbooks on economics. "Not the factory and the farm, but the classroom and the library were their environment." Loaded with heavy teaching work, they drew their economics largely from the English writers. But these old teachers—Cooper Wayland and others—undoubtedly left their impress upon American history. The men, however, who occupy the largest place in Turner's book are Cardozo, the brilliant South Carolina Jew, a strong opponent of his fellow Jewish economist, Ricardo; Tucker, the Virginia scholar and statesman, a non-Ricardian economist, "far in advance of his time," and in Turner's opinion one of the ablest American thinkers the subject has had; Henry C. Carey, the protectionist and extreme optimist opposed to all the pessimism of Ricardo and Malthus; John Bascom, one-time university president and college professor, "who acquired his knowledge and bent in economics from the classical texts"; Bowen, Harvard professor, author of an economics text, and critic of Malthusianism and Ricardian rent; Amasa Walker, father of Francis A. Walker and a statesman and business man, who, contrary to popular opinion, but according to Turner, did not hold Ricardo's theory of rent; and Perry, Williams professor and "one of the best equipped economists that America produced prior to 1885." The limitations of space prevent a detailed account of these various writers.

Professor Turner, in his resumé, points out that "with two exceptions, the early American economists who advocated freedom of trade adhered, broadly speaking, to the Ricardian theory of rent. Protective tariff advocates, on the contrary, contested that theory." He explains that the early statesmen and economists based their argument for free trade on Ricardo's theory. Hence the alignment on Ricardian rent.

Professor Turner's book is well worth reading. One who reads it will be impressed with the fact that American economists may take pride in the writings which their predecessors have left them.

FRENCH PUBLIC FINANCE

By Harvey E. Fisk. v, 363 pp. Bankers' Trust Company

Reviewed by Robert L. Smitley *

It has been reported that Lloyd George made the statement before the English Parliament that "French Public Finance" by Harvey E. Fisk was the most accurate and unbiased estimate of French Finance that had been published.

In concise, unambiguous terms the publishers of the book state:

> This book tells authoritatively the story of how France financed her war expenditures and how she is today meeting the financial problems of the reconstruction of the devastated regions. It gives the history of French Public Finance and of her banking system with chapters on how France is governed. All statistical data used in the tables was obtained from official sources.

It is a great relief to find a book which really gets down to official facts as does this one. There is an element of sincerity and accuracy throughout which leaves the impression of careful checking up and truthfulness. In no place is there material which suggests propaganda. No emotional elements interfere with the proper conclusions drawn from actual figures. It is the highest form of academic thesis, but softened for the reader because of the simplicity and clarity in the presentation of the facts.

A great majority of books dealing with economic phases are offered by publishers to the public without thought for the effect. Most of these books are written by lazy authors who involuntarily steal an idea and then write reams of words to support that idea. The lazy investigator establishes an hypothesis and then collects a number of figures, from any source, so

* Formerly Cashier for Shearson, Hammill and Company.

that his hypothesis may be bolstered and carry conviction.

Mr. Harvey E. Fisk does not follow this lazy method. He has spent many months in first collecting the original documents and figures. When the data has been collected, it has understandingly been translated. An ordinary translator of French into English would have caused results which would have approximated a joke. The technical terms of finance do not readily lend themselves to ordinary translation and it requires a clear, analytical, trained mind to properly present French financial terms. It is most evident that Mr. Fisk has accomplished this result and that his translation and definitions are accurate. Furthermore when comparisons are made the economic significance of many changes are considered which would not readily have been discovered by the novice or the lazy author.

In the chapter discussing the cost of the war, for example, the author makes the following statement:

> In view of the depreciation in the purchasing power of all currencies, it is necessary in order to obtain an accurate statement of the cost of the war to reduce the statistics to some common basis. Especially is this necessary if we are to institute comparisons between the statements of the different nations.

Thus when the excellent tables are set forth, the adjustments mean something. They are not a lot of irrelevant figures. They offer real bases for comparisons and in addition percentages are worked out.

The most amazing thing about the book is the scientific method of inductive reasoning. Whatever conclusions are arrived at are based on clear presentations. No conclusion is suggested based on the deductive method of research. Furthermore the chapters are brief and there is no waste of paper space. One of the most interesting pages in the book is the "Money Cost of The Great War." Others have written from four to five hundred pages on this subject without giving half the required information.

After having set forth the foundation of the subject—the costs of the war—the author enters into the method by which the war was financed by France with proper comparisons for other countries. This chapter, like all the others, is illuminated by basic statistics and graphs which assist the reader to visualize the actualities. The continued arrangement is delightful in its logical sequence: "The Credit Structure," "Devastation," "Reconstruction," "International Comparisons," "How France is Governed," "The Budget," "National Expenditures," "National Revenues," "National Debt," and "The Post-War Financing." Having set forth these facts, the author then delves into the matter of "Administration," which includes a history of the Bank of France and its operations, as well as the operations of the unofficial corporate and private banks.

Thus having logically presented the whole structure he ends his presentation with a summary of The Fortune of France.

The interrelation of finance in 1922 is of vastly more importance to us in the United States than it was in 1814 or in 1871. The effect of deterioration, financially, of any one country on all other countries is of far greater consequence than heretofore. Particularly is this effect a serious one so far as the United States is concerned; for it is quite manifest to the veriest novice of finance that we cannot enjoy the fulness of prosperity unless France is able to recover her financial and economic equilibrium. Whether or not she will be able to recover, is necessarily based on her past history, her method of administration and her adjustment of the budget. Therefore the reader of "French Public Finance" has an opportunity to possess the actual figures, the authentic history, and the administrative procedure. With these tools, he may determine the eventuality of the situation and adjust his own affairs in accordance with his conclusions.

For the investor in French securities, or for the prospective investor, the author has provided an analysis of the Public Debt which is conclusive. Furthermore, he has listed a résumé of each of the public debt notes including those contracted by "unfortunates" of the war and secured by pledges of state annuities such as City of Rheims, 120,000,000 fcs., Group of Coal Operators of the Nord and Pas de Calais

1,200,000,000 fcs., etc. Each of the debts are quite fully described. But, in addition, the prospective purchaser of French obligations has set before him a summary which will influence him in connection with his action. He knows the disposition of the revenues.

No chapter can be more enlightening to the student of economics than the one on International Comparisons. These comparisons have again been reduced to a purchasing power basis and:

> . . . on this basis the people of France are carrying the heaviest burden, $86 per capita. Belgium comes next with $77 per capita, then England with a burden of $71 for each of her nationals. Italy's people are only carrying a load equal to $27 each, not much more than the United States where we, each of us, must find $21 for government. Germany's national expenses on this basis amount to only $15 per head of population, not much more than before the war.

There are complete economic and statistical tables reduced, as far as possible, to common denominators, accompanied by a number of illustrative maps. The results obtained from this careful compilation are vastly different from some of the wild guesses which have been made during the past three years and are therefore more useful.

The above outline of what the book contains does not describe the excellence of the outline economic history. This is particularly valuable and the reader is able to obtain this economic interpretative history in a few brief chapters, which could not otherwise be obtained unless through the reading of half-a-dozen thick tomes.

It would be a really wonderful undertaking if Mr. Fisk were to make such a study of each and every one of the leading nations of the world. He has already handled the subject for this country in "Our Public Debt," for England in "English Public Finance since the Revolution of 1688," and in a smaller way for Canada in "The Dominion of Canada." It would be similarly beneficial if a copy of these books could be read—and understood—by our professional politicians. Should our legislative bodies suddenly be endowed with unselfish, brainy members, the reading of these studies of public finance would have a very constructive effect.

Any business man who does not take advantage of the material which this book presents is missing an opportunity.

REVIEWS OF BUSINESS PAMPHLETS

Methods of Paying Salesmen in the Coffee Roasting and Grocery Trades. Prepared by The New York University Bureau of Business Research. Lewis H. Haney, Director. New York City.

Descriptions of business methods of an individual concern are usually interesting and frequently helpful. When, however, a pamphlet deals with a group of business concerns and records general practices followed it is much more valuable to the business executive.

The different methods of paying salesmen are listed as follows:

1. Straight salary
2. Straight commissions
3. Drawing account and commissions
4. Mixed methods

> Nineteen per cent of the dealers reported that they paid all salesmen a straight salary. Twenty-three per cent pay a drawing account and commissions; 4 per cent pay straight commissions; and by far the largest number, or 54 per cent do not have a uniform system but pay both salaries and commissions.
>
> Of those paying commissions, 56 per cent pay on the basis of sales, 16 per cent on gross profits less deductions, 16 per cent on net profits, and 12 per cent on gross profits. Those who base commissions on gross profits less certain deductions often get close to a net profit basis, depending upon the amount of deductions made.

Bonuses and prizes are discussed somewhat in detail and it was found that practices vary so much that little can be done except to set forth the various kinds of bonus payments which are given as follows:

1. Bonus on largest tonnage
2. Bonus for decrease in outstanding accounts
3. One-half cent bonus on profitable brand (paid on sales above quota)

4. Five per cent bonus on all sales above quota
5. Extra commissions on slow-moving articles
6. Bonus on special drives
7. Bonus for largest tonnage of leading brand
8. Bonus for seasonable specialties
9. Bonus of $\frac{1}{8}$ to $\frac{1}{4}$ cent per pound extra for sale of certain brands at certain times (Slow-moving articles, or seasonable specialties)
10. Bonus for new customers
11. Five dollars per month bonus for new business
12. Prizes for new accounts
13. Extra commissions to move slow-selling items
14. Bonus for reducing expenses. "The regular commission is 5 per cent on sales. If sales cost us less than 10 per cent the salesman gets an extra commission or bonus"

Other subjects discussed in this pamphlet are: "Expense Account," "Drawing Account," "Automobile Expeuse," and "Checks on Salesmen's Work."

From the appendix is taken the following specific illustrations of mode of payment:

This method of compensating salesmen has been worked out by the writer from his experience covering 20 years, actual road work, and we believe it is as near ideal from both standpoint of salesman and house as can be worked out.

In the first place, through this method the salesman benefits from every extra moment of time spent in work, benefits from every saving due to headwork, benefits from every increase in profit due to good salesmanship; in fact when a salesman takes our price book out with him, he is practically in business for himself as he carries our costs and has a splendid institution behind him filling his orders on which he makes a profit, with his only overhead made up of his own personal expense. This he can control as he sees fit.

From the house's standpoint, the arrangement is ideal inasmuch as we have no expense accounts to question or worry over. We have no salesmen's automobiles to carry as an investment, and undoubtedly a salesman is much more careful with his own machine than he is with one owned by the house. From a credit standpoint the salesman, bearing 50 per cent of the losses, is more careful in the accounts he sells, is more energetic in making his collections. From the sales standpoint, the territory is combed cleaner as every salesman realizes his territory and customers are his capital. Distribution means more to the salesman under this method as it gives him added income.

Explanation of the salesman's monthly sales reports is as follows:

From the gross amount of sales on each item there is first deducted 6 per cent covering the following items:

General advertising 2 per cent
Shipping and delivery expense 2 per cent
Interest on capital investment 2 per cent

General advertising covers only newspaper publicity and window display material furnished by the company. On all special advertising arranged by the salesman with his trade, demonstrations, etc., the expense is borne 50–50 by the salesman. After deducting the 6 per cent above mentioned we have left the profit which is found in the right-hand column. From this total amount of profit is then deducted all rebates, discounts, freight allowances, special advertising, and in fact every other item of expense, which gives us the net profit. This net profit is divided 40–60, 45–55, or 50–50, according to the expense entailed in covering different territories. All losses are charged against the gross profit and all recoveries are credited.

The pamphlet is a good illustration of the type of literature such leading educational institutions as New York University, Harvard University, North Western University, University of Wisconsin, etc., are constantly issuing for the benefit of business executives.

Woolen Mill Costs. By Clinton W. Bennett. National Association of Cost Accountants, 130 West 42 Street, New York City.

Cost accounting has progressed further in the metal working trades than in any other trade, partly because cost problems first received serious consideration in such industries and partly because more literature has been written on cost accounting for the metal industries than for textile mills and woodworking shops.

The treatment of standard costs in this booklet is particularly good.

Two chief classes of materials used in a woolen mill are mentioned and the methods of accounting for them are explained. There is a table showing how mixed costs, for example, are calculated. The writer states that labor costs in the average yarn mill can be obtained best by styles according to manufacturing operations. The general operations are listed. Where the

actual labor varies very much from standard the method of controlling the variations is shown. There is a list of burden centers and the procedure to be followed in developing burden rates is carefully explained, the various bases of distributing burden being mentioned. The writer thinks that commercial expenses can usually be distributed best on the basis of total mill costs. He says that waste is too often expected as a necessary evil. The information that a waste report should contain is mentioned.

The United States Supreme Court on Misleading Trade Terms. The Bank of America, New York City.

This pamphlet of eight pages contains the full text of the opinion of the Supreme Court of the United States in ordering the Winsted Hosiery Company to desist from labeling its products "wool" when they contained material other than wool. In addition there are three pages of comment on the significance of this decision in business practices and advertising.

The trend of such comment is indicated by the following paragraph:

> A new step is thus marked by the decision in the progress of American business towards higher standards of honesty and fairer dealing in selling and advertising. The fight has been long and well-fought. The *Printers' Ink* advertising statutes in many states; the vigilance work of the Associated Advertising Clubs of the World; better business bureaus in many cities; courageous publications; trade associations; financial organizations and professional bodies have all done immeasurably valuable and difficult work in protecting the public from the grosser forms of advertising fraud. But until now the misleading trade term appeared to be a fixed institution in American business which few were inclined to attack. "Trade term" had almost become a synonym for "misleading name."

A copy may be had gratis upon application to The Bank of America, New York City.

Cost Methods in a Hosiery Mill. By W. F. Evers. National Association of Cost Accountants, 130 West 42 Street, New York City.

Mr. Evers explains the cost methods in a large hosiery mill employing 1200 operatives and having a daily capacity of 4000 dozen pairs, making 20 different styles of seamless hosiery of pure silk, fiber silk and cotton, and a combination of these materials.

The departments which comprise the office organizations are listed. The accounting for material, labor, and overhead is discussed and some accounting problems that arise in the manufacturing departments are treated.

A form of cost analysis sheet is shown and explained together with several other forms, including yarn and silk distribution, goods in process ledger, summary of unit costs, and production chart.

Stock Turnover in Retail Clothing Stores. By Horace Secrist. Bureau of Business Research, Northwestern University School of Commerce, Chicago, Illinois.

The title of this booklet indicates the group of executives by whom such discussion can be read to advantage. It deals primarily with the relationship obtaining between stock turnover rates, sales, gross margins, expenses, and net profits. Conclusions are visualized by graphs, which nicely supplement the letter press.

CHRONICLE AND COMMENT

AN APPRECIATION

The following letter refers to an article which appeared in the October number of *Administration:*

Editor Administration:

Let me congratulate you on the article entitled "Business Forecasting in the Edison Industries," appearing in the last issue of *Administration.*

I think this is one of the best written and most valuable articles on business that it has ever been my pleasure to read. Please convey my appreciation to the authors.

Yours very truly,
J. H. Bliss,
Comptroller Libby, McNeill and Libby.

COMMERCIAL EDUCATION IN ENGLAND

At the meeting of the Mansfield (England) and District Chamber of Commerce, held September 28, 1922, Professor A. W. Kirkaldy, of the Department of Economics and Commerce, Nottingham University College, delivered an address on the need for higher commercial education. The following quotations are taken from the report of this address appearing in *The Nottingham Journal*:

"The business man is born, not made," said Prof. Kirkaldy in opening, "but a business man who has the advantage of the right type of education in boyhood and early manhood under modern conditions must necessarily have a great advantage over a man of equal capacity who has to feel his own way."

After the great French war England held a position of very great advantage. The steam engine and the new machines and processes connected with the factory system had practically all been invented in this country. Europe had been a prey to dissension, with political and social upheavals for nearly half a century. . . .

America then was very sparsely populated and her energies were occupied with agriculture. England became the workshop of the world and was destined to hold that position for a long time. Those who carried on our manufacturing industries had few competitors until the nineteenth century was beginning to wane.

The competition where it existed was between rivals in the same country or in the same district, and hence the question of what would be the best training for business life was comparatively a simple one.

England was able to exact a fairly heavy tribute from the rest of the world, exchanging goods manufactured with a few hours' labour against foodstuffs and raw materials which required many times the amount of labour in their production. It was natural that the progressive nations as the world settled down should take measures to mitigate this position.

English machinery and English methods were studied by the Continent and by America. Thus, slowly but surely, the competition became international.

"The new condition of affairs," went on the Professor, "needs little amplification to show the great change that has come over the demand made on the powers, knowledge, and experience of the captain of industry. America notably began to study commercial methods and tried to reduce them to a system. In Germany after 1870 the methodical Teuton began to see the advantage of applying science to manufactures. The result was that this country began more and more to feel the increasing competition. . . .

"In this country the long period of prosperity influenced business men to imagine that business was best learnt in business premises. Thus partly owing to prejudice and partly through inertia the old system of taking a boy from school at the age of 16 or 17 and putting him in an office or factory has been maintained almost to the present." . . .

"Mr. Joseph Chamberlain was one of the first to realise that a great change had come over the commercial and industrial world. . . . He saw the necessity for developing University teaching in this country and began in his own city by developing the Mason College into a great University. He had studied American methods, he knew what was going on, on the Continent, and he worked out a new system of University education which, while maintaining the highest form of University culture, put those who went through it on more than an equality with either an American or a German who had benefited by the commercial and industrial methods in those two countries.

"In a word he founded the first Faculty of Commerce in which certain Sciences and Arts subjects should maintain the University standard, whilst subjects like Accountancy, Economics (Theoretical and Applied), Banking, Exchange and Business Practice should be made known to the student before he entered upon his business career." . . .

The address concluded with an explanation of the type of training commenced in Birmingham twenty years ago which has now led to the foundation of Faculties of Commerce in Manchester, Newcastle, Leeds, London, and Nottingham. This system of education ought to be understood, said the lecturer, because undoubtedly it is the close co-operation between the leading business men, economists, and officials in Germany, which has enabled the German to mitigate to a very great extent the effects of their defeat in the late war.

"Germany is superficially prosperous and unless great care be exercised, stands a great chance of winning the Peace" he declared. "The forces which are at work take their main strength from the new type of commercial education which we in this country are merely countenancing, but which if we were wise we should strive to understand and expand."

DETERMINATION OF WORKING CAPITAL

Editor Administration:

In the October issue, page 506, Chronicle and Comment, there is a letter asking if you can give a formula for figuring out the amount of working capital required for a business.

In the fourth article of the series I am writing, I am presenting a formula for accomplishing just that purpose. However, in considering the use of such a formula, it must be remembered that exactness is not a thing that can surely be reckoned upon because of the fact that current conditions of manufacturing and sales policies and other possibilities tend to affect the question greatly. The best that can be done is to establish a figure of working capital that may be taken as an approximate standard. This is the most that I am attempting to accomplish in the working out of a figure of working capital for any undertaking.

If your correspondent can wait until the publication of Article 4, I think that the facts therein will be of at least some assistance to him.

Yours very truly,

J. K. Mason.

* * *

The article referred to by Mr. Mason will appear in the January number of *Administration.*

A STOCKHOLDER'S RIGHT TO SUBSCRIBE TO INCREASED STOCK

Editor Administration:

The following decision relating to a stockholder's rights when his corporation increases its capital stock may be of interest to your readers.

In a recent case in New York,[1] the stockholder had been living in Yokohama, Japan. Later she left Japan and took up her residence in Los Angeles, California, but failed to notify the Great American Insurance Company, in which she owned 35 shares of stock, of this change of address. The company sent her notice of a meeting to increase the capital stock. This notice was sent to her last known post-office address, "Box 250, Yokohama, Japan," on October 7, 1918, and stated that a meeting would be held in New York City on October 24, 1918 to increase the capital stock from 20,000 shares to 50,000 shares, and further that the stock would be issued to the present stockholders in due proportion to their holdings at $150 per share, one-half to be paid in 30 days and the remaining half in 60 days. The meeting was held as notified, and the increase was duly authorized. The day following the meeting, October 25, the company mailed to all its stockholders a circular letter notifying them of the increase of stock and that subscription warrants would be issued in a few days.

This stockholder had authorized the Insurance Company to send her dividend checks to the Title Guarantee and Trust Company of Brooklyn, so, as there was not time to get a reply from her at Yokohama, the Insurance Company also notified the trust company and inquired if it was authorized to act for the stockholder in the matter. The trust company replied that the stockholder had returned to America, that Messrs. Steele and Otis of New York City were her counsel, and that the matter should be taken up with them. Accordingly the insurance company sent the subscription warrants to the attorneys named and asked them for instructions. They, however, sent no instructions, and the $52\frac{1}{2}$ shares to which the stockholder could have

[1] Minnie F. Hoyt *vs.* Great American Insurance Company, App. Div. (N. Y.) May 1922.

subscribed were, with other unsubscribed stock, sold on December 16 to others, in order that the insurance company could secure the approval of the Superintendent of Insurance in time to do business on the increased capital for the coming year.

The new stock was said to have been worth $315 per share, hence the resulting loss to the subscriber on the 52½ shares was $8,662.50, for which sum in damages her representative brought suit against the insurance company. The plaintiff's claim was based on the fact that she did not have *actual notice*, and that the insurance company by failing to give her actual notice and by selling the new stock afterward so she could not come in and subscribe for it later was liable in damages for the amount of her loss.

The insurance company in defence claimed that it was not responsible for *actual notice*, that if, for example, a stockholder went off on a polar expedition, without leaving an agent accessible to notice and empowered to act, he had no claim to special notice or delay of procedure in order that he could take his stock when he got ready.

The issue came up in the lower court on the pleadings, that is as to whether the facts as to the notice given as stated by the insurance company were a good defence. The lower court decided that the plaintiff had a good case as it was stated, and that the defence of the insurance company was not good. From this decision the insurance company appealed to the higher court, the Appellate Division, where it was argued before five judges, who joined in overruling the decision of the lower court.

Edgar S. K. Merrell, Justice, speaking for the Court said in substance:

> Under the decisions of our courts, each stockholder is entitled to reasonable opportunity to obtain his proportionate share in any increase of the capital stock of a corporation upon the same terms as the other stockholders. Such rights of a stockholder, however, are subject to such reasonable conditions as are imposed by a majority of the stockholders of the corporation when authorizing such increase. The only question presented on this appeal is as to whether or not, the plaintiff was afforded reasonable opportunity to take advantage of the right to share in said increase of stock at the price fixed by a majority of the stockholders. There can be no question of the right of the stockholders at the meeting to impose the conditions under which the subscriptions were to be made. "A majority of the stockholders, as part of their power to increase the stock, may attach reasonable conditions to the disposition thereof." It was, we think, not unreasonable for a majority of the stockholders to impose the condition that the shares of said increase of stock should be subscribed for on or before the 16th day of December, 1918.
>
> The law does not require *actual notice* to every stockholder of the proposed increase. All that the corporation was required to do was to act in a reasonable manner and to do what it reasonably could to afford its old stockholders an opportunity to share in the increase. . . .
>
> It seems to the court, that the defendant corporation used every effort reasonably within its power to notify the plaintiff of his rights in the premises. Through no fault of the insurance company the plaintiff had rendered it impossible for him to receive actual notice. The law does not require the impossible. It would hardly be contended that had the stockholder gone to a remote part of the earth, thus putting it beyond the power of the corporation to give him actual notice of a proposed increase of stock, and without providing for the giving of such notice to some authorized agent, that therefore the corporation would be denied the right to increase its stock. It seems to us that the defendant used every reasonable means to safeguard the plaintiff's rights in the premises.

The decision as given was unanimous.

Yours very truly,

THOMAS CONYNGTON

A FINANCIAL PROBLEM

Editor Administration:

In *Administration* for October 1922, page 503, there is a problem proposed concerning two methods of redeeming a bond issue, and in comparing the two methods we are asked to consider that the taxpayers' money is worth 6 per cent.

The writer specifically states that this is the only point which gives him any concern, yet in the solution proffered by your correspondent this is ignored.

Let us look at the problem from this standpoint:

> A man is offered his choice of two methods of paying an obligation; first, by a series of payments as follows:

$1,250 at the end of six months
6,250 " " " " one year
1,125 " " " " one year and six months
6,125 " " " " two years
....
125 at the end of nine years and six months
5,125 " " " " ten years

The alternative method is by the payment of $1,829.57 every six months for 25 years, a total of 50 payments.

If money is worth 6 per cent, compounded semiannually, which is the better way to pay the debt?

To find this, we proceed thus:

Divide the amounts in the first series by 1.03, 1.03^2, 1.03^3, 1.03^4,...... 1.03^{20}, respectively.

Next, divide $1,829.57 similarly by a series of powers of 1.03 from the first power to the fiftieth.

The smaller of the two results is the one more favorable to the taxpayers, under the conditions cited.

Of course, the actual work of making these calculations can be simplified, the first by using reciprocals of powers of 1.03 as given in the usual bond texts, the other by the use of an annuity table.

Yours very truly,
G. W. Greenwood

FORESIGHT IN BUSINESS

Editor Administration:

The articles appearing in *Administration* on the budget and on business forecasting in general must meet the approval of every thinking business man. In all such forward-looking, however, it must not be forgotten that while the records of a business and its general condition form an essential basis, the most signal successes in business are almost invariably the result of that foresight which comes of an intelligent knowledge of present conditions, and a thoughtful analysis of their probable trend in the future. Such analysis must first set utterly aside all theories which are not in alignment with facts, as well as those oft-cherished illusions which cause us to live in a fool's paradise.

The complete antithesis of all this, how to make an utter failure, was shown in our conduct of business after the war: in the delusive hope of peace on earth, good-will towards men; in the belief of a new-found democracy of all mankind; in the continuance of the abnormal demand for commodities that would come from the immediate rehabilitation of ruined Europe; in the fantastic faith that national obligation and teamwork would swallow up class greed and selfishness. For whatever may be our knowledge of material things, we shall fail of comprehension of their true intent unless we remember that the leopard has not changed his spots, and that the old Adam is still in us.

The first unpleasant fact for us fully to comprehend is that we have not in all matters reached the bottom of the long decline which follows every such abnormal outburst of prosperity as that which was our portion during the war, for the tangled skein of prices is only partly unwound. Some lines—copper, rubber, leather, farm products—seem to have gone to the very bottom of the hill and reacted moderately, but only maintain their present position by careful proportion of supply to demand. While other lines, iron and steel products for example, must sooner or later take their share of liquidation, no matter what the reasons, real or imaginary, why this should not occur at present.

Now there will never be any permanent and satisfactory adjustment between the prices of all commodities, for there is no common denominator of cause affecting them all alike, but there must be far greater agreement than at present if we are to resume our upward movement for any lengthy period towards distinctly higher levels of prosperity. Fortunately we have a yardstick of almost universal application, and that is the relation of the purchasing power of agricultural commodities to all those things that the farmer buys. For that comprehends in its scope our commercial relations with Europe, which must take our surplus farm products to enable us to maintain their prices for the domestic market.

Just at present there is a growing sentiment that we are facing a period of advancing prices, especially in lines that have not been liquidated, and that consequently we are leaving our troubles behind us, and entering on higher levels of commodity

prices and of wages, as a permanent prophecy of far better times. Any enterprise undertaken on this basis is built upon the sand, and is the same species of fallacious foresight that was in vogue after the armistice. Also, we shall get the same result now as then, in the shape of a setback and not of progress. There will be much opportunity in business during the next six months, but if that period be marked by advancing prices as the most significant feature, then such opportunity will be a thing of the passing moment with the full assurance that its profits will be temporary and that the ensuing reaction must be discounted in advance.

Summed up, the foresight that seeks to analyze the present situation and its likelihoods must scan the story of history and experience which tells first of sudden and violent bursts of prosperity accompanied by exceedingly high prices. Then always ensues the sudden collapse, followed by a long, slow recovery, many times the period of the days of fatness, and a recovery which comes only when liquidation is complete, the surplus stocks of commodities out of the way, and a demand in being that taxes the capacity of supply. Unless all these symptoms be present, as they are not now, the story is merely one of a false dawn which will soon fade.

There is another phase of foresightedness which extends over a longer period of study and possibilities than the immediate future, and to which the varying fortunes of business are only passing phases. It is the problem of a section or a state, of its people and their history, of their peculiarities and their environment. Take this in its most elemental form, that of a state with comparatively few natural resources, and comparatively few industries, and see what it brings forth. Iowa is essentially an agricultural commonwealth with but little mining development, not much in the way of forests, and a limited amount of manufacturing output, compared with some of her neighbors of the east. It has an extremely fertile soil, and an annual rainfall that is usually all-sufficient for its needs, and is rarely afflicted with those long droughts which are often the portion of the states to the west and the southwest. It generally ranks first in the production of corn and hogs of all the forty-eight commonwealths.

These facts are easily had, but they are only the beginning of the story, for the quality of foresight in a study of this nature rests in far-reaching interpretation of the facts I have enumerated and their trend in the future. Merely agricultural communities are likely to be limited both in the nature and extent of their wants, since they are apt to be those which pertain only to the farm and its outfitting. But it is not so with Iowa, and for many reasons, chief among them being her standing in education and intelligence. For she ranks low in illiteracy and high in education, and it is already a truism that education increases both the quantity and quality of a man's wants and desires. This is typified in the Ames State Agricultural College where the girl graduates go back to the farm with a craving not only for all the conveniences and labor-saving appliances of the household, but also for those things of the higher life of the mind, and understanding of which they have had just enough to excite and not to quench their thirst.

This same tendency is shown in the desire of each little town to make itself a place worth living in by providing within itself all the things of progress and advancement. The problem, therefore, is as to where the Iowa folk will find ways and means to gratify these desires and aspirations, for wealth and much spending money usually center in great manufacturing and trading cities, and not in agricultural communities. The answer to this query is found in two homely facts which lie at the end of our quest, and in our understanding of them is found the test of our capacity of foresight. These two facts are hogs and corn, in whose production Iowa is pre-eminent. Corn is beyond all question the best single food for our four-footed farm animals, and we produce 75 per cent of the corn that is raised in the world. Pork, in its numerous forms, was clearly shown by the war to be the most nutritious of all meats for its bulk, and the most economical and easily transported, and of the total number of hogs in the world 60 per cent are in this country. There is a market for hogs at all times and in all sea-

sons, and if the demand for corn is dull and unremunerative at times, it can ever find a sale on four feet in the shape of a hog. So hogs rank along with cotton and wheat as among the great cash crops of the farmer.

Now Iowa knows these things, and though she seeks to add dairy cows and poultry as side lines, and future crop diversification, the staff upon which she leans will always be hogs and corn, and, furthermore, her constant purpose is to go still further along the lines of intelligent and economical production and marketing of these two staffs of her agricultural and economic life. So in the study of where to prosecute business and to judge of its future, it is not the things which lie on the surface that must determine our judgment and our foresight, but the question as to the permanence and nature of these resources, and their relation to the people who are to develop them as is exemplified in corn and hogs in Iowa, wheat in Canada, cotton in the South, iron and steel manufacturing in the Birmingham district of Alabama, and the cotton mills of the South Atlantic states.

Yours very truly,
Archer Wall Douglas

INVESTMENT OPPORTUNITIES ABROAD

The following suggestions are taken from a letter written by Dr. Jeremiah Jenks, who has been in Southeastern Europe and Palestine for some months past. They are reprinted, by permission of the Alexander Hamilton Institute, from *The Institute Wire.*

Palestine will probably never have much interest for the world (especially for the United States) from the point of view of industry. There are several other places abroad, however, where I think it would be well for business men in the United States to be making investigations rather promptly for investments on a rather large scale. You know, I have thought for the last two years, that instead of loaning a great deal of money to Europe, we should make direct investments, buying up enterprises, managing them, and taking the profits directly, which profits would probably be used in the development of business in the country itself. While some opportunities are ripe now, others are not, due to the political situation.

In Italy, for example, there are very excellent opportunities for investments in hydroelectrical plants, as well as other enterprises. The present companies have no capital to keep up or develop these plants in the proper way. If American capital will come in, they promise that all the parties in the government will unite in passing proper legislation to make transactions legal and give the businesses a chance to grow. Of course the monetary situation must be taken into consideration for means of protection, but the opportunities are worth careful investigation, and those who are already on the "inside" will reap the greatest advantages.

In Constantinople and Turkey in Asia, the opportunities are quite as promising for railroads, development of mines, purchases of real estate and also the building of factories and office buildings. Since the government at the present time is most unstable, one would need to advance much more slowly as the question of titles and legal holdings is very complicated. However, matters may stabilize rather suddenly at almost any time, and it would be a good plan to have these opportunities well in hand so that prompt action might be taken.

UNIFORM VACATIONS—AN INTERESTING EXPERIMENT

The question of vacation with its difficulties of arrangement, its upsetting of routine and its general disturbance of business is a problem which, yearly, confronts every business of size in the country. In an effort to solve this problem more satisfactorily than is usually done, the Upson Company of Lockport, New York, manufacturers of fiber products, early in July, sent out the following notice to their employees:

We are going to try experimentally this year a new vacation idea.

We Intend to Close Down Our Office and Plant for Two Weeks Beginning July 23, and Ending Promptly on Midnight of August 6!

Whether or not this uniform vacation period will be continued another year is dependent upon the support we get from our associates this year.

The plan permits practically every associate taking his or her vacation at the same time. During the vacation only a "skeleton" organization will be maintained. This "skeleton" organization will consist of two or three in the office to answer correspondence—telegrams—receive callers—and handle rush orders. It will also be necessary for the Mechanical Department

to remain at work in order that important repair work may be done—work which cannot be done while the plant is in operation.

Workers not getting a vacation during the uniform vacation time specified above, will be allowed two weeks later, in order that everyone may get a rest and change.

While the office workers were given the entire two weeks vacation with pay, if they had been in the employ of the company for a year, the mill hands received graduated pay, ranging from two days' pay for the employee of one year's service to 12 days' pay to the employee of 6 or more years' service.

Notice of the uniform vacation plan was also given to those with whom the company had dealings.

A letter was mailed to the trade, announcing the vacation. It urged that stocks be checked up, and orders anticipated by at least 30 days. Co-operation in limiting correspondence only to imperative matters was also sought.

Another precaution was a supply of printed cards to notify correspondents of the vacation and to inform them that a reply would be made immediately following the vacation period.

After the vacation period was well over, and there had been time to determine the results, Mr. Upson, secretary of the company, was asked for a brief statement of the practical workings of the plan. In response to this request Mr. Upson writes as follows:

Editor Administration:

The uniform vacation period, as worked out by The Upson Company this year, was an unqualified success.

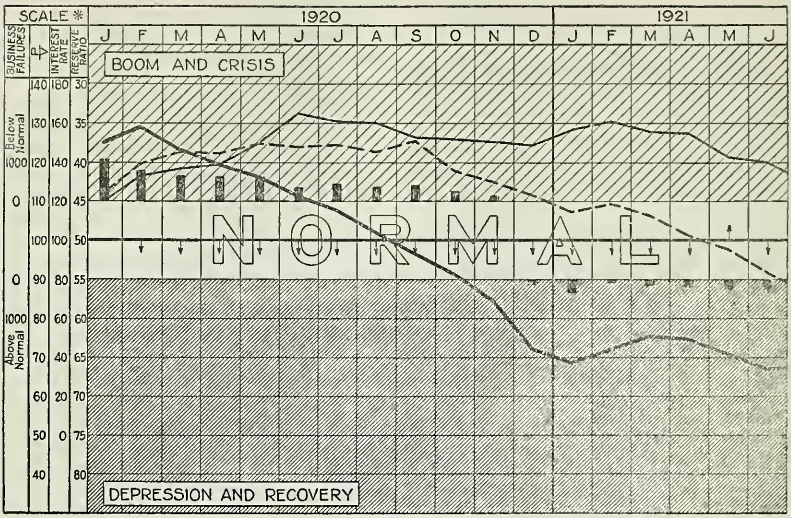
We are so enthusiastic about it that we shall adopt the same vacation plan another year. As yet, we can see no way of improving the rules and regulations under which the vacation was conducted, a copy of which was sent you with our letter of July 29.

We believe a uniform vacation period is a decided step toward a greater efficiency in offices where there are a considerable number of workers. Our skeleton organization handled all the details during vacation and when the 80 per cent of the workers came back, they found their desks clear and were ready to go ahead. In other years, vacation period, with its resultant clean-up, has meant disruption, overworking, and confusion for nearly six months of the year, whereas, under the uniform plan most of the disturbances incidental to vacation are all taken care of within a short period of two weeks.

Moreover, the workers in the mill are enthusiastic because it gives them something which the average working man does not get i.e., a vacation. Moreover, under our plan, there is an incentive for the worker to remain in the employ of the company, knowing that after he has served a few years he can get a vacation with two weeks' pay.

All in all, we cannot too strongly recommend the idea. Of course, the success or failure of the plan depends largely upon the co-operation of the trade, so that neither the business nor our customers suffer. We sent advance notices to the trade, and were greatly pleased with the enthusiasm with which the idea was received. Many of our dealers, in fact, wrote commendatory letters approving the plan and stating that it was one they thought should be generally adopted.

Cordially yours,
The Upson Company,
W. H. Upson, Jr., *Secretary*



*Note on Scale: Failures—Number above or below normal; P/V Line—Index number, 100 equals 1912 rate;

THE BUSINESS TREND—A BAROM

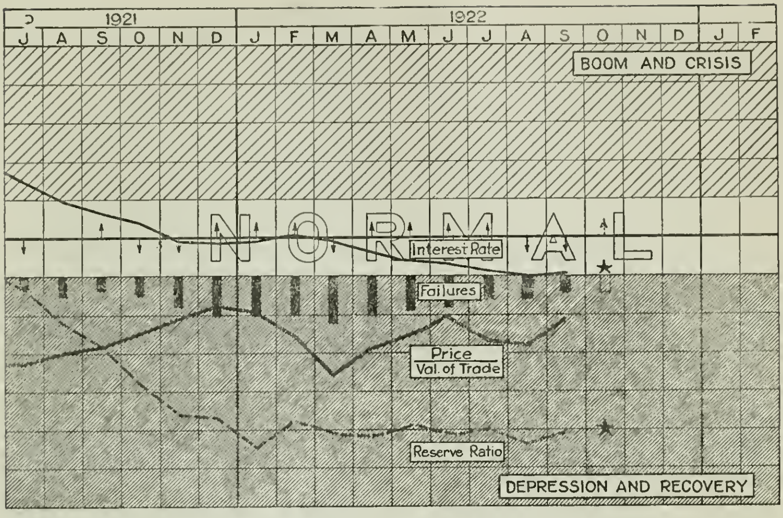
PREPARED BY LEWIS H. HANEY,

EXPLANATION OF BAROMETER.—The trade barometer shown above is so constructed that when business is in the stage either of boom and expansion or is moving downward in the early stages of crisis, the curves and vertical bars are in the upper area. When the general business condition is that of depression or the beginning of recovery, the curves and bars are in the lower area.

The light line shows the course of the interest rate on prime commercial paper, with adjustment for normal seasonal variation. It is based on an index number, 100 equaling 5 per cent. The dotted line shows the federal reserve bank ratio of cash reserves to note and deposit liabilities, *the curve being inverted* so that an increase in the ratio causes a fall in the curve. The heavy line shows the relation between the price level (Bradstreet's index number of wholesale prices) and the physical volume of trade (car-loadings × tons per car). The bars projecting above or below the normal zone indicate the movement of business failures (Dun's). Bars projecting above the "normal" area, show a smaller number of failures than normal; bars projecting below show an excess of failures over normal; the absence of any bar would show that failures are normal. The arrows pointing up or down from the center line of the normal zone show by their direction the course of a special six-commodity price index. The stars indicate the probable trend of the curves during the current month; the dotted bar the probable trend of failures.

THE BUSINESS TREND IN OCTOBER

Since last month there has come a small but decided improvement in the outlook for business recovery. In August all the factors in our barometer showed a downward trend. In September all the factors turned upward except our special six-commodity price index. This index being based on an average for the month, was held down by the low prices of the early part of the month and was rising at the end. The data available for October shows a



Interest Rate—Index number, 100 is based on 5 per cent; Reserve ratio—Actual figure, scale inverted.

ETER OF INDUSTRY AND TRADE

Director, New York University Bureau of Business Research

continuation of the upward trend of September as is indicated by the stars shown in the chart. Accordingly, the conclusion may be drawn with much confidence that the forecast for the next six months is for a renewal of the upward trend of business. It may be said that business and industry in October were nearer to a return to normal than at any time during the last twelve months,—nearer, indeed, than any time since 1919.

"The Business Trend" continues to indicate that the turn of the year will this time mark the beginning of real industrial recovery and the return of normal business conditions.

The reading of the individual factors in the barometer this month gives the following results:

1. The special six-commodity price index indicates that the average for September was below that for August. This was the second month of decline in that index, and it marks the end of the reaction which came in September, a reaction reflected in the increased number of failures and the August decline in the PV line. At the end of September, however, the price index was moving upward. The price indexes of Dun's and Bradstreet's showed considerable advances as of October 1. The outlook now is for further advances, especially in those commodities which are not undervalued, which will at least maintain the price level and probably bring further net gains.

It is to be noted that serious maladjustment still exists in the prices of various commodities. The value of the fuel, building material, and naval stores price groups may be said to be "too high;" while the prices of metals, live stock, bread stuffs, and hides and leather are still "too low." Further adjustments are required to equalize these groups, and it is likely that the industries concerned with the low price commodities will benefit by that adjustment. The peak of the building boom of 1922 has been

passed, and building materials may be expected to show some reduction.

2. During September, the interest rate on commercial paper increased from 4 per cent to $4\frac{1}{2}$ per cent and down to the middle of October it appeared that the higher rate would at least be maintained. It is to be remembered that the curve shown in the barometer is corrected for "seasonal variation" and, consequently, the upward trend in that curve means that there has been a net increase after allowing for the usual seasonal tightening in the money market. This means a greater demand for funds and marks real improvement in business. The time is passing when money will be a drug on the market.

This movement bears out our suggestion that the level of interest rates will probably not reach such low points as have been made in previous depressions. It seems that the bottom has been reached. Accordingly, it may be anticipated that the high point has been attained by the prices of most gilt edged bonds, although speculative factors may still affect many good issues.

3. As forecast in "The Business Trend in September," a slight rise has occurred in the reserve-ratio curve. This is chiefly due to increased deposit liabilities, and note circulation. As in recent months, however, the fluctuations in the reserve ratio do not have much significance. It appears that the upward trend of the reserve-ratio curve (remembering that this curve is read on an inverted scale) has continued through October. This is in spite of increasing discounts. No immediate possibility, however, of an increase sufficient to forecast a major setback in the stock market is in sight. In fact, the rise in the PV line forecasts an advance in the general list.

Perhaps the most notable feature of the Federal Reserve ratio is the process of equalization among the several reserve districts which is going on. It seems probable that the excessive reserves of some districts will soon be equalized with the relatively small reserves in other districts. This process marks progress in the return to normal business conditions and when accomplished the movement of the reserve-ratio curve will take on greater significance.

4. The barometer shows a sharp decline in the number of failures in excess of the normal. As the failure bars become shorter,—indicating diminishing excess over the normal number,—strong evidence is given of industrial recovery.

5. As noted in the last issue of the barometer the temporary downward trend of the PV line was broken in September and a relatively sharp rise in the curve took place during that month. This means a much better outlook for profits in business in general and is a most important factor in the barometer in forecasting continued improvement.

The cause of the upward trend of the PV line during September was the upward movement of prices toward the end of the month, coupled with a relatively small increase in the physical volume of trade. Bradstreet's price index on the first of October was approximately 9.2 per cent above the average for the year 1921. On the other hand, a three month's average of railway freight tonnage, after adjustment for seasonal variation, shows a small decline. This represents a readjustment of the rather excessive volume of the earlier months which reached its peak in June. The net result is a more favorable relation between the general price level and the physical volume of trade which forecasts a better general level of net earnings in business.

The conditions most required for further recovery at present are stabilization of foreign conditions, a further readjustment and stabilization of domestic prices and the maintenance of caution to prevent inflation. On the whole, our foreign trade has been disappointing to those who have been predicting increases. It appears that the physical volume of exports and imports of manufactures has been fairly good, but our foreign trade in raw materials has fallen off as has the total volume measured in dollars. An index number of the weighted average level of foreign exchange rates which is prepared by the New York University Bureau of Business Research shows a decline as of October first. The need of further adjustment in domestic prices has already been commented upon.

As to inflation, while there is little sign of it at present, it must be recognized that it is a possibility. The potentiality is real. There is danger of infection from abroad where inflation exists on all hands. Moreover our steadily swelling gold reserve would make inflation easy, even if it does not invite it. Immediate danger lies in the attitude of the agricultural sections of the country which will undoubtedly strive to bring about an expansion of credit, and competition among the banks may weaken the resistance of financial leaders. As long as the caution and hand-to-mouth buying, born of recent crisis and depression, are observed, there is little danger.

ADMINISTRATION

The Journal of Business Analysis and Control

DECEMBER, 1922

INCOME TAX SUGGESTIONS

BY ROBERT H. MONTGOMERY *

THE near approach of an important date in federal taxation—such as March 1—reminds us that we may have done something in taxation matters which we should not have done, or may have left something undone which we should have done. As there is a time limit within which almost everything connected with federal taxation must be done—the time within which returns or corrections must be made, or relief or revision applied for—early attention should be given to every item about which doubt exists.

First, a few general observations are in order in regard to items of income or expense the treatment of which is doubtful.

It is the custom of revenue agents who examine the accounts of taxpayers to question many transactions which taxpayers look upon as entirely in order. No criticism should be directed against these representatives of the Treasury as long as they act in good faith. In fact, they should be criticized if they do not investigate and report upon every item about which the slightest doubt exists. They do not pretend, at least they are not authorized, to pass final judgment upon a single point. Every comment and recommendation is reviewed by some other representative of the government, and taxpayers are supposed to be given full opportunity to contest any recommendations for the assessment of additional taxes. As revenue agents are in duty bound to report for discussion every item about which there is the slightest doubt, it is not surprising that many of their recommendations are not approved by their superior officers.

A good illustration of all this is the deduction permitted under the law for business expenses. Many taxpayers deduct large lump sums. These are thrown out *in toto* by the revenue agents with the explanation that vouchers have not been submitted. Taxpayers and agents are both in error. It is true that the law permits the deduction of all business expenses and does not prescribe that vouchers must be secured and preserved for each item, but it is equally true that the Commissioner is empowered to prescribe forms to be used in making returns and to enforce reasonable rules and regulations under which de-

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ductions may be claimed and these may require vouchers in certain cases. There is, however, no Treasury rule that every deduction by a taxpayer must be supported by a voucher. Indeed if there were such a rule it would not be reasonable and could not be enforced.

While this is true it is not unreasonable to require that taxpayers in claiming deductions shall furnish the same sort of evidence of payment as is required in everyday business practice. In some concerns, for instance, salesmen are permitted to render unitemized expense accounts, and these in turn must be accepted by the Treasury as sufficient proof that the payments are necessary business expenses. The Treasury would, in fact, occupy an inconsistent position if it ruled that no payment is a proper payment unless a voucher is secured. It is said that the Collectors of Internal Revenue and Postmasters and other governmental business agencies issue upon demand, receipts for money paid to them, but judging from the reports of those who have tried to secure such receipts the difficulties are many and in a great number of cases unsurmountable.

The controlling test is: What sort of evidence would the United States Courts demand in support of legal deductions which taxpayers claim and which revenue agents disallow? The answer again is that all that is required is reasonable proof. If a taxpayer claims $250 for traveling expenses and does not have a single voucher to show for it, but testifies that he made a specific number of trips to specific cities and that his railroad fares and meals averaged so many dollars per day, and his testimony were uncontradicted, the deduction would be allowed.

In order to avoid such controversies, revenue agents should call the attention of taxpayers to the insufficiency of their proof and suggest that affidavits be prepared supporting the deductions.

II

The foregoing is illustrative of other disputed items. In the past taxpayers have claimed and revenue agents have disallowed, all doubtful items. Taxpayers frequently do not hear about the disallowances until long after the revenue agents' reports are filed. In the absence of vouchers to support deductions taxpayers should therefore record and preserve data or memoranda explaining the deductions.

It is not unreasonable for the government to expect a growing improvement in the accounts of taxpayers. Inspection should be made easy. This is important because the expense of income tax investigation is becoming enormous and this expense comes out of the pockets of taxpayers. Any lessening of the expense should decrease the tax burden. The expense can be measurably decreased if taxpayers will reduce the time required to audit returns.

It is highly to be regretted that the tax returns of all taxpayers cannot receive careful and judicial investigation by competent Treasury employees. A vast number of returns are so investigated, but there are and will be many exceptions. The chief difficulty is the lack of experienced and courageous examiners. The present pay of most of the employees of the Bureau of Internal Revenue is insufficient, which means that many of the men seek positions where ability and compensation go hand in hand. Congress is indeed ill advised when it restricts the salaries of highly competent employees.

III

A short time ago New York Stock Exchange prices were substantially affected by a rumor that the Treasury would propose to Congress the taxation of surplus accounts of corporations. The rumor was untrue, the Treasury had no such intention. It is, however, old stuff and probably will be used again. Those who, to guard against such taxation, advocate the declaration of stock dividends as a means of wiping out accumulated surplus accounts are ignorant of the trend of taxation legislation and decisions. The United States Supreme Court has decided that a stock dividend is not a distribution. Therefore, if there were a tax on undistributed surplus (which there will not be) it would include surplus as it existed before the declaration of the stock dividend.

It is almost childish for taxpayers to think that Congress and the Treasury can be deceived by so transparent a trick. When there are good reasons for stock dividends they should be declared; but it is a fallacy to think that corporations will save any tax by such procedure. There never will be such a tax as applied to old surplus nor to current surplus unless it is allowed to accumulate beyond the reasonable needs of a business. And as the courts have decided that directors are almost the sole judges of what is reasonable, distributions need not be made as long as the directors believe it is for the best interests of a corporation to conserve its resources.

I am, however, of the opinion that taxpayers who contemplate reorganizations, or exchanges, or sales of capital assets should proceed forthwith to take advantage of the extraordinary privileges clearly extended to those who wish to save taxes. The provisions of the 1921 law are not free from doubt but they ring clear as to the intention of Congress. The intention is to free many capital and investment transactions from immediate tax. I think the law is too broad and makes it too easy to reduce taxes. It was intended to reduce taxes, but it was not necessary to overdo it.

The present law makes it possible to exchange securities without the payment of any income tax until the securities received are converted into cash. Before the law was officially interpreted by the Treasury it was believed by some authorities that the exchange provision would be narrowly construed. In the present regulations the construction placed upon the law is liberal. These regulations will stand unless the law itself is changed. If we should have an entirely new law I would expect both the reorganization and the exchange provisions to be changed.

IV

Federal tax returns for the calendar year 1917 were due on or before March 1, 1918. The Revenue Act of 1921 provides (Section 250(*d*)) that the taxes due under any act prior to 1921,[1] "shall be determined and assessed within five years after the return was filed." When waivers have been signed the time may be extended. Taxpayers who have signed waivers, however, have not received the treatment which they were led to believe would be accorded them. I think in many cases there was not sufficient consideration for the waivers and they can therefore be annulled. In view of past experiences taxpayers have much to lose and nothing to gain by signing waivers.

[1] Under the 1921 Act, assessment must be made within four years after the returns were filed.

The five-year limit for the year 1916 (for those who did not sign waivers) has expired. The expiration date caused no excitement. The maximum tax rate in 1916 was so low—comparatively—that it was hardly worth while to file a claim for refund or dispute the government's claim for additional taxes. But for the year 1917 the case is quite different. The rates were enormously increased. The excess profits tax was in force for the first time. Not only were the rates high, but on March 1, 1918, when the first returns were due, the Treasury and the taxpayer together were sailing an uncharted sea in a rowboat without oars. Even now we do not know what some of the sections of the 1917 law mean; as to one or two sections we never shall know, because they mean nothing! It is, therefore, not surprising that many differences of opinion between taxpayers and the Treasury have arisen regarding the inclusion or exclusion of items of revenue and expenses.

The law says that the Commissioner must *determine* as well as assess additional taxes within five years after the 1917 returns were filed. Perhaps most individual returns for 1917 were filed on or shortly before March 1, 1918. In case extensions of time were granted to individuals or corporations returns were filed at a somewhat later date. Roughly speaking, the Commissioner must determine and assess 1917 additional taxes before March 1, 1923.

V

We may as well assume that in many cases which involve complicated problems there will be no proper determination before the expiration of the five-year limit; but in view of the time which already has elapsed and the broad provision in the law permitting the Commissioner to waive formalities when the collection of taxes appears to be jeopardized, it will not be unreasonable for the Commissioner to expedite all pending cases. This will mean that some of the additional assessments will not be based upon proper determination. As taxpayers who are properly advised and those who know and insist upon their rights will subsequently have ample time to contest any overassessments which may be made, no serious injustice will follow these premature decisions.

It may also be assumed that the Treasury will take all possible steps to expedite its claims for what may appear (however slight the appearance may be) to be underpayment of taxes. Will taxpayers be equally diligent in filing claims for overpayments within the statutory period? Many taxpayers did not deduct in 1918 and 1919 a sufficient amount for amortization of war facilities; others did not deduct enough for depreciation of plant or patents; others did not set up actual values at March 1, 1913, as shown by appraisals.

The Revenue Act of 1921 provides (Section 252) that no refund "shall be allowed or made after five years from the date when the return was due, unless before the expiration of such five years a claim therefor is filed by the taxpayer." This section of the law is only of importance to taxpayers against whom additional assessments have been made for 1915 and earlier years and for overpayments of later years discovered by the Commissioner as the result of an examination by the Commissioner. No matter how meritorious the Commissioner finds their claims to be, they cannot be considered unless formal claims were filed within the five-year period.

VI

A great proportion of taxpayers' suits against the government for taxes erroneously assessed and collected have been decided against the government. It is, therefore, of great importance to proceed before it is too late. There are many cases in which clear overpayments were made and freely admitted by the Treasury, but the taxpayers are told "we are sorry, but Congress has forbidden us to repay you the amounts illegally and erroneously collected. Your only remedy is a special act of Congress." Anyone familiar with the possibilities of securing relief in the manner indicated knows how futile it is to attempt it. As to 1916 and subsequent years the present law allows a reasonable time within which to file claims for the refund of and bring suit for the recovery of taxes which are alleged to have been illegally or erroneously assessed and collected. Claims for refunds may be filed within four years after the additional tax was paid and suit may be brought within five years after the tax was paid, provided the claim for refund was filed six months before suit.

The Treasury is so far behind in its work that many additional assessments for 1917 will be made in February 1923 even though the taxpayer's exceptions will not have had the benefit of the consideration and hearing contemplated by the law. What, then, will be the position of a taxpayer who does not admit the correctness of the assessment? The 1921 law provides that no claim in abatement may be accepted when taxpayers have had the benefit of the hearings provided in section 250(*d*). Therefore, taxpayers who will be deprived of the right to be heard by the Income Tax Unit and the right to appeal to the Committee on Appeals and Review *before* assessment should be granted the same rights after assessment. Ordinarily taxpayers who are deprived of a fair hearing before assessment and who pay additional taxes under protest file claims for refund, and when the claims are disallowed bring suit in the Court of Claims and get back their overpayments with interest. It is an exceedingly simple process and much less annoying than are the hearings in the Income Tax Unit.

VII

One of the alleged improvements in the 1921 law was the duty of the Treasury to fully investigate all apparent underpayments before assessment. When a decision is based on such investigation, claims in abatement cannot be filed. The tax must be paid. But in all cases where the provisions of the law as to investigation and hearing and appeal are not complied with claims in abatement must be accepted.

There is some merit in the government's position that chaos would result if reasonable time limits were not prescribed. Unfortunately, the balance of remedies has been and still is in favor of the government. The rights and limitations should be equal.

The technical procedure regarding over and under assessments, refunds, abatements, credits, and suits at law appear to be complicated but such is not the case. But a full exposition of the whole procedure cannot be made in this article. Taxpayers who have no perturbation regarding overpayments or underpayments for 1917 and prior years can think about the date March 1, 1923, with equanimity. Those who are in doubt about their taxes for those years are well advised if they ascertain the exact time-limitations upon their rights and remedies.

VIII

Taxpayers should not forget that the Commissioner has the power to enter into an agreement whereby all matters in controversy can be finally settled. This is an important feature of the new law. Examiners in the Bureau of Internal Revenue frequently disagree with the findings of their predecessors and many cases are being reopened which taxpayers believed to have been finally closed one or more years ago. Nothing can be more annoying than the feeling of uncertainty regarding taxes of past years. It is bad enough to have revenue agents examine records back to 1850, (as some do), and tell you that the dollar you gave the janitor of the office building on Christmas 1918 is not a business expense: it is much worse when after you have paid the additional tax alleged to be due (you knew it was not due but you did not like to fight a small amount) you are told that another examiner thinks that the two dollars you gave the office boy on Christmas 1917 was likewise not a business expense. Therefore, when the next examination is made and you agree on a fair settlement, be sure to follow the procedure laid down in the law and secure a release from further examinations for the same period.

If taxpayers are well advised they will bring all possible pressure to bear on Congressmen to refrain from any amendments to the tax law in the next session of Congress. Past experience —bitter experience—should be sufficient warning of proposed improvements in tax laws. It simply cannot be done with the present trading, cowardly method of handling business measures in Congress. We have had five federal tax laws in less than ten years. We need a ten-year tax law holiday as much as we need a ten-year naval holiday.

One highly important subject can be dealt with without tinkering with the present law. I refer to the matter of tax-exempt securities. I am in favor of extending some measure of relief to the industrious rich which they do not now have, but I cannot understand the continuance of the enormous tax advantage which is permitted to the idle rich. It will probably require a constitutional amendment to tax the income from the present tax exempt securities. If it does there should be no delay in securing it.

IX

Between now and March 15, 1923 most individual taxpayers will be able to determine how to report their transactions for the year 1922. In the case of corporations the situation is different. Many are unable to close their books and make their returns by March 15. The Commissioner has full power to grant extensions in all meritorious cases. I have never known a request based on such grounds to be refused.

On the whole taxpayers are given ample time to file current returns, and are afforded the widest latitude in making amended returns for prior years. It is only when the returns for the year 1917 are concerned that there is good reason for solicitude. Get your house in order before March 1, 1923, or you may forfeit valuable rights.

SOME ASPECTS OF THE RELATION OF FOREIGN SECURITIES TO THE MONETARY SYSTEMS—I

BY WALTER E. LAGERQUIST*

CERTAIN European statesmen with the recent strengthening of some of the foreign markets have advocated a return to the payment in the currency of the issuing country of the principal and interest of new foreign bonds floated in the United States. The claim is made that business conditions have so adjusted themselves that these countries can now reasonably make this demand. If foreign bonds are not to be made payable in dollars, the very important but much misunderstood relations of security prices to the money standard of a country is thus again raised. Obviously, if the exchange rates between the countries selling and purchasing the securities remain at par, there is no issue. If, however, the forces controlling these exchanges are thrown out of equilibrium, a disturbance in foreign security prices at once takes place.

One of the most subtle of these influences is the character of the money system of the issuing country. While other economic questions are of equal importance in their effect on security prices, the magnitude of the problem necessitates limitation in this article to some phases of the monetary problem to foreign securities prices, with particular reference to the influence of the relationships under depreciated money standards. The unsettled economic and financial conditions in many quarters of Europe make these relations of peculiar interest and an understanding of them more important than ever.

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Eighteen months ago there seemed to be some indication of an easement in the paper money orgy of Europe. But on the basis of September figures, we will have to more than ever deal in astronomical numbers in considering European monetary systems. Food prices in Paris, according to the French Bureau of Statistics, are 368 per cent higher than in 1910. Industrial material is 391 per cent higher. Paper money increased from 35,281,000,000 francs in March, 1922, to 37,500,000,000 on October 5, 1922.

Germany's *Frankfürter Zeitung's* index of average commodity prices of October 1, based upon 100 for the 1914 index, shows an index of 44,089 as compared to 29,675 September 1, and 14,276 on August 1; 9,268 on July 1, and 4,238 January 1, 1922. Since the first great landslide of the mark in June, prices have increased fivefold and 441 times the pre-war average. Prices rose in September, alone, 48 per cent. The increase in currency printing now proceeds at the rate of 7,000,000 marks a day with a probable increase before the end of the year to a total of 500,000,000,000 marks. The *Riccardo Bachi* index of Italy's wholesale prices on the basis of 100 in 1913 has risen to 531. Poland's index, with a base of 100 in 1914, has risen to 59,231, January 1, 1922, and 103,342 on July 1. Paper money showed a sharp upward movement in June and is still near its former peak.

Taking the more extreme case of Austria, prices and currency, long since apparently beyond the counting stage, still continue upward. The cost of living in

Vienna is 11,306 times the average of 1914. The money output of the state bank had increased from 174,114,-000,000 kronen at the end of 1921, to 2,277,677,000,000 kronen, an increase of thirteen-fold in nine months. Russia, whose currency we have long since ceased even to consider, increased from 200,000,000,000,000 paper roubles at the end of June to 700,000,000,000,000 roubles at the end of August. The last official rate was one gold rouble to 3,500,000 paper roubles and the unofficial rate, one rouble to 5,500,000 paper roubles. The price on the basis of the 100 price index for 1914 was 182,758 on January 1, 1922, and on September 1, 5,429,980, showing an increase of thirty-fold in the first nine months of this year.

Germany, Austria, Poland, and other of the European countries possessing highly inflated currency systems, do not lack well-trained international bankers, yet the governments proceed as if experiences with paper money were unknown. As this article is being written, one of the parallel columns of a national daily, bears the news item of a coronation ceremony with a reported expenditure of 75,000,000 francs while in the other column, 7,000,000 people in an adjoining country will, it is said, be facing starvation this winter. In the former country it was reported that even a small loan could not be secured from a responsible bank. A king attempts to appease the militarist party by a war in Turkey as a justification for his return. A humiliating defeat results, and millions of dollars more are added to the nation's war debts. The cost of the army of occupation in Germany has far exceeded the total reparation payment of France to Germany in 1871. The Reichsbank, unable to keep up with paper money needs now demanded, has employed the lithographic presses of the ubiquitous Stinnes. And still the game shows no abatement.

II

Let no inference be drawn that any attempt is being made to predict the future outcome. Where one might now and then venture an estimate of the future, political intrigues and manipulations so often alter conditions through artificial control that an opinion expressed on economic facts today becomes valueless tomorrow. Nor can reference be made to the possibilities of the various reparation proposals, important as they are. The writer will, however, attempt to point out some of the fundamental relations existing between the money system of a country and the security values and prices. Because of the acquaintance of American readers with many of the current facts in Europe at the present time, a number of illustrations have been used from this field. Though many of the present European currency experiences are extreme, this very fact assists us in seeing the basic problems involved.

We grow so easily accustomed to the idea of a stable monetary system that we come to believe it immutable and everlasting. Every paper or contract bearing the stamp in terms of the monetary standard of one's nation is accepted *carte blanche.* This may be true to a large measure of the coveted gold standard of western nations today. Yet this standard, now so universally accepted (with the exception of one nation up to the recent war period) has been established as the sole standard of all nations within the memory of men of this half century. Also neither the overissuance of paper money nor the change to a new standard of money is unique to the present period. All but one of the important nations up to the World War had at

some time either wholly or partially changed their standard. No money standard, as has recently been demonstrated, is assured of a continued existence. A state may consider the change necessary, or a nation in a financially weakened condition may be forced to alter its legal tender. Long-term bonds issued in the payment of these standards at such times have usually suffered losses in the hands of the holders. Though the problem of every country and of every period in this respect is a peculiar and individual one, deductions drawn from historical experiences are helpful in interpretation. Necessarily in an examination of the influence of the money standard upon security prices, the emphasis of the discussion must be placed upon the factors affecting the money standard to obtain a proper understanding of underlying causes.

High-grade securities, on the other hand, make a more economical method than the use of gold in the settlement of international trade balances if more credit or capital are needed than can be provided by current bills. By their use, a country can check the flow of gold which might drain its reserve of metal. Even where an excess stock of metal is held by a country, securities have superior advantages as secondary reserves as they draw interest during the period of their deposit. In the former instance they have frequently either been used to check the development of a money market strain or to relieve the tension of an already overstrained financial market. Particularly in emergency periods, as during the past World War, have securities been used to secure capital, credit, and money. To the extent to which securities can be used in meeting any one of these needs, they tend to stabilize prices and more effectively distribute funds.

One of the important early instances of the use of securities in modern times to stabilize the market was in the famous crop shortage of Western Europe in 1847, which started a large exportation of gold from France. To relieve the strain and furnish an unhampered market for her grain, Russia offered to purchase the National bonds of France to the amount of 50,000,000 francs. Thus, securities were offered in payment to the Russian Central Bank for Russian grain, and Russia paid out its gold to its own farmers. The same procedure involved the extension of the $10,000,000,000 credit advanced by the United States to Europe to purchase munitions and food in that country. In the payment of the French indemnity to Germany, the pressure on stock exchange securities served as a buffer which prevented the collapse of the market. Following the now famous agreement between the bankers and President Cleveland in an endeavor to stabilize the money market and prevent the outflow of gold, the effective method of control was made possible in the utilization of securities.

On the other hand, reactions of a security price due to conditions in the instrument may have an equally bad effect upon the financial markets. When certain mortgage bonds of Argentina in the 80's were issued in England, they were quickly purchased by British investors. The purchasers had, however, neglected to examine carefully their securities, so they failed to note that the principal was payable in gold and the interest in the paper currency of the country. When Argentina faced financial difficulties the bonds were greatly depreciated and trade relations were further aggravated by the large amounts of these depreciated bonds which were thrown on the market. Currency inflation in

this way, cuts down the value of securities and becomes a method of repudiation. Had the silver party succeeded in 1896 we should have followed the same policy by inflating the dollar and thus have partially repudiated our debt payable in currency.

As seen from these few illustrations, high-grade securities form a valuable addition to the money and credit system of any country. To this extent they protect the holdings of all investors. They are analogous to the reserve forces of a national army. They have the advantage of ease in shipment, and, give rise to bills of exchange in the international market in which they are sold, thereby obviating any shipment of specie. The banker dealing in foreign exchange and foreign securities or securities of his own country listed on foreign exchange is, of course, constantly watching for differences between markets to obtain an advantage in one market as against another.

III

In any discussion of foreign securities, a sharp distinction needs to be drawn between the securities of countries with normal and well-established money standards, money markets and rates of exchange, and countries with depreciated standards and abnormal markets. Likewise, a distinction should be made between the purchase of securities for investment and speculation. The former problem is the one of chief interest in this discussion. The distinction needs to be emphasized as the interests of the speculator and the investor are often quite opposite. This is not anomalous when we know that the speculator is desirous of fluctuating prices and an investor of stabilized prices. The investor's viewpoint necessarily means the long-time viewpoint, consequently temporary fluctuations have an interest only in the extent to which they influence the long-time movements. In order that we may properly establish our bearings let us take the simplest form of exchange transactions in securities familiar to all between the New York and London markets. Bearing this simple transaction in mind under normal conditions one can appreciate the variables which modify the value of the investor's foreign security holdings.

Let us assume the simplest case which might normally prevail between England and the United States and follow the course of a security between these markets. This assumes the bond payable in sterling. If an American holder of an English railroad bond issued at par and payable in pounds sterling, purchased in 1902, desired to sell the bond at the present time he would suffer a discount (eliminating any other costs) between the par rate of $4.86 and the present exchange rate of $4.44. In addition to the losses on the payment of the principal are the losses on the coupons. On the other hand, if the bond is issued when sterling is at a discount and sterling returns to par, the holder has a profit. Foreign bonds issued and sold in the United States since 1914 have had the advantage of this exchange profit where the bonds were sold on the basis of the existing market and the advance in the exchange rate has taken place. If the rate of exchange is fixed in the terms of the bond contract at the time of issuance, the profit accruing to the holder can be definitely stated in terms of dollars.

Again assume as is a common practice between certain countries that two alternatives in payment are allowed by the issuing English corporation. The bonds are sold in the New York

market in dollars with the coupons and bonds payable at the wish of the holder either in New York in dollars, (i.e., the holder of a $1,000 bond would receive $1,000 in dollars), or in the London market at the par rate of exchange of 1 pound sterling to each $4.8665 of the face of the bonds. For simplicity let us consider the payment of the principal alone at maturity and the rate of exchange at $4.84 per pound sterling at maturity date. If payments were accepted in London and dollar exchange sold against the payments, the loss to the holder would be $0.0265 on each $4.8665 held. On the other hand, if the price of the pound sterling advances to $4.89, payment would be asked in London in order to take advantage of the profit by selling sterling exchange against the proceeds, as the amount received in New York would be only at the rate of $4.8665 per 1£.

When market factors are taken into consideration, the problem of profits is not such a simple one. Two of these influences as indicated, are that of the money system of the country and the exchange rate in which the transactions must be measured. These are obviously made the more difficult in the future interpretations where uncertainty in the monetary markets prevail.

Where a loan is floated in the United States, it will force the exchange rate against the issuing country when the money is advanced to the borrowing country. On the other hand, if the funds are left in the lending country for the purpose of purchasing foods to the extent with which this is done the effect of the loan is counterbalanced. To the country extending the loan it is the same as an export and to the country borrowing, the same as an import of capital.

When the coupons are paid for the interest charge or the principal itself is paid the reverse is true. The settlement, otherwise, is the same as with other current obligations.

Prior to the war as such payments were largest on January and July 1, these payments were anticipated in an accumulation of credit in London. As these remittances have always been handled directly through the bank's own accounts, they have not come so largely into the regular channels of current financing of trade. Large remittances in coupons are made, for example, by the London banks to the Orient which are readily accepted by the banks of these countries, and balances in trade must offset in order to secure a balance in the transactions between the two countries. As is well known, a lack of balance of a nation's obligation cannot long continue without disastrous results to both its financial and economic organization.

IV

The interest of the security-holder in rising and falling prices is twofold. The first is in the direct effect on the decrease or increase of the purchasing power of his bond and coupons at maturity. The second is the direct effect upon the profits of the industry which issues his securities, through the influence upon the price of its own purchases of materials and the products sold. To the extent that an industry can overcome this second disadvantage by a more rapid increase of its own prices the advantage will obviously be reflected in its own securities. The only distinction between the foreign corporation securities and the domestic corporation securities in respect to prices is the advantage or disadvantage in the exchange rates. This forces a difference between external (exporting

and importing) prices and internal (domestic) prices that often work great injustices and exert consequently an important influence on corporate securities. This is referred to later in more detail.

A fall in prices is to the advantage of the securities owned, and a rise in price a disadvantage. In the former the purchasing power is increased, and in the latter decreased. As price changes are slow over short periods, short-termed creditors and debtors are rarely affected except in unusual war, panic, and depression periods, and in event of the use of over-inflated currency and credit. Long-termed obligations, however, may meet with harsh injustice. European government bonds which have no maturity date but can be paid at the option of the government can easily await the time when conditions are favorable. The creditors and the taxpayers must bear the brunt. Private corporations and investors have, however, given little attention to these influences.

The above effects relate to securities with fixed returns. While common stock or ownership shares are also affected, corporations possessing earning power in such periods, can adjust their own prices and consequently their dividends on stocks, in a measure, to the change in price levels. Fixed return-securities cannot. Any variation in the price of these securities is due either to a speculative interest or the slight leveling up in price in the adjustment to a more rapidly depreciating currency. It will always be found, however, as stated later that these increases are more than offset by the purchasing power of securities which is reduced more rapidly than the price of these securities goes up. These conditions also apply to stocks like railroads and public utilities where the rates are fixed by statutes. The recent experiences in the United States supply many cases in point.

Also, the value of securities having a fixed return would temporarily drop to much lower price levels in depreciated money in a country like Poland, two-thirds of whose people are dependent upon agriculture, as compared to a highly industrialized country like Belgium. But, the value of the currency at one-fiftieth of the original is just as much an elimination for all practical purposes as a very much greater depreciation in paper money. Consequently, after the depreciation has reached a given point, it matters little how much farther the downward trend goes as far as it affects the economic consequences to this class of security-holders. One of the chief reasons for the relatively lower drop in security prices of rural countries is that few people have incomes from bonds and as a result the market is a narrow one. When the income of those dependent upon the fixed income of securities decreases to such an extent that the bonds must be sold, no supporting market exists that might assist in checking the fall in values.

The variations between the price level on foreign exports and imports and domestic prices, already mentioned, are the most puzzling. Immediately following the war many a foreign salesman in Germany, unfamiliar with exchange rates demanded cash when he sold his goods and then turned about and bought goods again. Had he, instead, bartered on the domestic price base which those familiar with exchange rates did, his profits would often have been increased as much as 50 per cent. Where depreciation of a currency occurs, every instance has shown within the country a comparatively slow and more regular movement, while the pressure outside the

country forces a more immediate adjustment and discounts future changes more quickly. Likewise the securities market which is more intimately and directly tied up with international finance will tend to discount the further advance in retail prices and the further domestic financial embarrassment. When the sharp internal depression takes place, of course, further depression of the whole financial structure follows, causing violent changes in both the foreign exchange rates and security prices. And where the exchange rate has been consistently downward, it is always safe to infer a further upward trend in domestic retail prices and the less active security prices. The active securities, as already suggested, will usually discount these changes somewhat in advance as stock markets are more alert in their discounting of changes.

As is well known, wholesale prices conform more quickly to changes in depreciated currency than retail prices, and with the continuing change in the exchange rate this lagging process must go on. For example, the further depression of the German rate of exchange which began in the early summer of 1921 was felt in the wholesale prices toward the end of the year and in retail prices, generally, toward the end of the first quarter of 1922. But even after the exchange rate has become stabilized retail prices generally must be leveled up somewhere near the world price levels. For example, wages and rents among the slowest to find their equilibrium are much below their relative pre-war position. This process takes some time. This, of course, assumes a stabilized exchange. The farther the depreciation of currency carries the price level upward, the narrower accordingly becomes the gap between wholesale and retail prices.

The German figures on wholesale prices in their continued rise have more and more shown a reduced premium advantage on exports. Where temporary and violent fluctuations in the exchange value of the mark occur they temporarily create a premium for a few weeks. The facts show that up to mid-summer the internal value of the mark as expressed in commodities was 60 per cent above the external value of the mark. From December 1921, to July, the wholesale prices in Germany had nearly doubled while the mark had declined about 33 per cent.

V

Regardless of the form of standard, too large an increase of gold, silver, or paper leads to inflation. An outstanding example of a depreciated silver standard is afforded by India's experience with the rupee after the price of silver began to fall in 1873. Austria's experience with a depreciated silver standard, though more complicated by its connection with inconvertible paper money was quite similar. Trade relationships were markedly affected, securities which occupied a minor rôle showed particular evidence in the fall of advancements made to industries in new capital.

The experience of the United States with the excess of gold imports which materially stimulated the inflation of the security markets in 1916 and 1919 is the most recent and marked experience in modern history of a gold glut. Two other financial factors, however, exercised an important influence in these two periods of security price inflations which make it impossible to measure the influence of any one of these factors separately. The factors which materially and directly affected the market were as given in the following:

1. The federal reserve system was established during the early months of the war and the decrease in reserve requirements together with the establishment of an asset currency greatly increased the possible expansion of credit. This amounted to the same thing as additional currency.

2. The belligerent nations of Europe were forced into a great increase of purchases in the United States. This abnormal buying then forced large gold shipments. Approximately a billion dollars was added during the war and the inflow of gold still continues.

3. With large increases and great activity in trade, the credit deposits (i.e., deposits growing out of credits extended) tend to increase in their rate of turnover. The effect is again the same as would come from a more rapid passing from hand to hand of gold coin. Irving Fisher estimated this increase during the period of the war from 54.0 to 92.4 per cent.

The increase of both credit and money was at a faster rate than the increase in the physical volume of business. The result was inflation. In other countries as Spain and Japan, the increase of numbers (2) and (3) were the chief causes of inflation. Obviously, the first is unusual. But, how did these conditions operate in influencing the security market? The explanation must be sought through the interest rate.

With a broader base of credit, cheaper money was available to business at the same time that an abnormal demand for goods was created from abroad. This meant greater activity with relatively greater profits. Needless to say, this directly affected the securities of the companies benefiting from this trade. The other influence, growing out of the low interest rate and abundant funds, was the greater activity created in the speculative security market, and, as in all inflated markets, it was carried by the latter beyond its legitimate limitation. The first overstrain, resulting from these conditions and the overdiscounting of the future markets, forced a collapse in 1916. The first evidence of this artificial topheavy market was anticipated in a partial reversal of the gold movements to certain neutral countries. The forces which were helping to push prices up were now reversing their movements and correspondingly reversing the trend in security prices, and this movement was not checked until these influences were again checked.

Under such conditions funds are secured at low nominal rates but, with prices being forced upward, larger amounts must be obtained to supply the need of high-priced goods. When ultimate adjustments come to a country the deflation will increase the value of the dollar which will mean that more goods must be produced to pay the obligation. That is, dollars of one value are loaned and dollars of another value returned.

In brief, then, when the general price level is forced upward, the same forces tend to keep the nominal rates down. The increasing price level and low rates in turn would tend to force security prices up. Experience has shown, however, that the same conditions seldom prevail at the same time in two countries involved in the buying and selling of investments.

It is apparent that if the opposite conditions than those discussed above prevail as to gold movements, i.e., if specie is exported, the general price level tends to fall, interest rates to go up, and exports to increase. Specie shipments may enter in only to an amount sufficient to adjust credit and debit balances. If securities are substituted, they will tend to stabilize prices permanently and enable a country to retain its specie for reserve purposes.

Furthermore, the nominal rate announced in times of a depreciated currency often has little significance (as it is never lived up to) after the depreciation has passed a certain limit; either day-to-day money rates are increased under some additional subterfuge charges or loans cannot be secured. If the latter is not enforced, only a certain class or type of securities will be accepted for collateral. This is true in Central Europe today. Recently, the Reichsbank would only accept Treasury bills. At the time of this writing, approximately 80 per cent of the Treasury bills are held by the Reichsbank.

In normal times the constant checking and re-checking between markets tend to stabilize and equalize the rates in the world markets. Where the demand for gold is abnormal and the rates relatively high as in the few months before the war in France and Germany, securities will tend to flow to more advantageous markets. With the anticipation of war difficulties, gold becomes more valuable than security-holdings, as it represents a more liquid asset.

Likewise when there is a high discount rate on short-time loans, there usually exists a greater pressure for gold, i.e., for foreign import. Such a condition further indicates that long-time obligations are even less desired and the amount of sales made on the important exchanges of the country in order to secure funds are greatly increased and security prices are depressed. Selling pressure is usually increased under these conditions by the forced unloading of the speculative market. With the increased discount rate, speculation, especially marginal accounts, becomes unprofitable and this exerts an additional selling pressure on the market. Consequently, if any sales of securities are made they must be made to buyers of foreign markets where discount rates are lower. Again, for example, if the United States has been investing heavily in French rentes, with such an unfavorable market, the purchase of demand bills drawn on Paris to pay for these rentes would tend to further depress exchange rates. The market of a particular issue of securities is also much more sensitive when securities are listed on more than one international market.

(*The concluding portion of "Some Aspects of the Relation of Foreign Securities to the Monetary Systems" will appear in the January number of Administration.*)

THE PROBLEMS OF THE CORPORATION TREASURER

BY GEORGE B. ROBINSON *

II—CURRENT BORROWING IN INDUSTRY

THE establishment of the federal reserve banks has greatly strengthened the position of the industrial borrower. Under the archaic banking system which existed prior to 1914, it was not an infrequent occurrence for an entirely sound borrower to be refused a loan by his banker because the bank did not have loanable funds. Banks could agree in advance to loan money only if they had it. Under the federal reserve system, if member banks are not in funds, they can obtain the required funds by rediscounting their borrowers' obligations. This has resulted in member banks being able to grant definite lines of credit upon which borrowers may rely.

Bank credit serves industry as a temporary substitute for capital investment. Its cost is normally less than the cost of capital, and it has the further advantage of being not only available when needed but retirable when not needed. Well-managed businesses have adequate credit available for any needs which may arise. With it they finance their opportunities and from this comes much of their profits.

A "line of credit," as it is generally known, is an amount of credit which a bank undertakes to have available for a borrower's requirements for a period agreed upon, usually not extending beyond the borrower's fiscal year or season, when the arrangement can again be the subject of discussion and such revision as new circumstances justify. The usual consideration for such a line of credit is maintenance by the borrower of a deposit account of from 15 to 25 per cent of the amount of the credit, whether the credit is being used or not.

The practice of banks varies considerably in the definiteness with which they express their obligation to the borrower in extending a line of credit. In many instances the bank's obligation, stated either in conversation or by letter, is qualified by such reservations as the bank desires to apply in the particular case. It may be stipulated that the borrower's financial position must continue to be as favorable as it then is, or that financial conditions generally must be satisfactory. In most cases banks do not intend that lines of credit should be under all circumstances definitely binding upon themselves. But when no reservations whatever are made, except the customary one regarding the maintenance of balances (which indeed serves as evidence of consideration upon which contractuality may be supported), the bank appears, particularly in view of the absence of definite legal determination of the meaning of a "line of credit," to accept a considerable risk that its obligation to the borrower might be construed as legally binding for the term stated. Banks, however, always make their credit investigations before granting credit lines, and only very unusual circumstances would cause withdrawal of such lines during the period set. In practice, therefore, borrowers may rely with confidence upon promised credit being available upon request.

* With Henry L. Doherty and Company, Securities Department.

II

The acquisition of adequate credit lines and the maintenance, without lapse, of sufficient cash balances with depository banks to justify these lines are two of the most important duties of the corporation treasurer. A clear understanding of what constitutes adequacy of credit must rest upon knowledge of these principles of modern banking practice which are the foundation for the reciprocal relationship between borrowers and banks. The most important and universal of these principles are the following:

1. Commercial banks loan money to enable borrowers to pay cash for goods and discount their bills. By thus financing the buyers of goods, banks enable sellers to make prompt collections.
2. Bank loans are made with the expectation that they will be paid when the goods are again sold (frequently after manufacture or conversion) and the proceeds collected.
3. Because borrowers are constantly buying and selling, renewals of loans are in most cases virtually new loans made to permit further purchases and the earning of new trade discounts. When loans are renewed because the goods they originally financed have not been sold as anticipated, they are no longer prime loans. When it appears that sale of the goods has been indefinitely deferred and the borrower has no other immediate resources for payment, such loans are said to be "frozen."
4. Borrowers are expected to pay all their obligations to each bank at least once a year; otherwise the bank will have loaned capital instead of credit. The loaning of capital is not a function of commercial banks.
5. Bank credit should never be permitted to flow into investment in fixed assets. While this is well understood by the majority of borrowers, it is a principle which is honored quite as much in breach as in observance.

Undeniable proof of this is found in the fact that such a high percentage of the permanent financing done by corporations is frankly stated to have for its purpose "the refunding of current liabilities." There is great need of learning to finance before instead of after the fact. The fault lies partly with the corporation treasurer, who figures that earnings yet to be made will pay for needed fixed investments which are being made, only to find later that an unsafe current debt has been created. It also lies with the commercial banker who loans excessively, relying on his ability (perhaps through an allied securities department) to refund or capitalize the current debt if necessary.

III

It is obvious, in view of these practical banking principles, that what constitutes adequacy in credit lines will vary considerably with the nature of the borrower's business. There are some businesses indeed which have slight excuse for using bank credit. A fair example of this is the foundry business which under normal conditions is blessed with a very short period of manufacture, and with prompt collections. Here working capital is not only very small compared with plant investment, but is in constant use, so that an adequate amount should be furnished by stockholders. On the other hand, the packing business requires the employment of enormous amounts of current funds, with, however, an ebb and flow which can only be efficiently and inexpensively financed by an elastic bank credit. The following principles, however, deserve almost universal application:

1. Credit lines should be substantially in excess of a borrower's maximum expectancy of requirements. The greater the margin, the stronger is a company's position. This is particularly true for

businesses which are constant borrowers; and for those which are not classed as prime risks.

2. Borrowers should have credit lines at more than one bank, no matter how small their borrowings may be. The advantage of several accounts for even a small business lies in the reserve strength they create. In times of tight money each account is an avenue of approach to the federal reserve bank.

3. Credit lines should be established by negotiation well ahead of the time they will be used. The best time is when money is easy and banks are eager for new accounts; the worst time is when credit is needed immediately.

4. Credit lines which are equal in amount to the legal limit of a bank's loaning power (10 per cent of capital and surplus for national banks, 20 per cent for the state banks of certain states) cannot be increased in an emergency. Smaller lines, and more of them, are therefore desirable.

5. The other extreme of having so many bank accounts that none of them is valuable to any bank is so rare that it is only necessary to point out that borrowers may also err in that direction.

6. Credit lines which are in full use are no longer an element of strength. Only open lines have present value. Moreover, the borrower who will cultivate a sense of pride at having open credit lines will frequently avoid bad commitments merely through his desire to keep his lines open.

IV

It would seldom be necessary to urge borrowers to obtain adequate credit lines if it were not for the *sine qua non* of adequate balances which is their corollary. To many business men cash on deposit appears to be an idle asset, and the resulting interest loss an unnecessary expense. In actual fact, it is an exceedingly active asset, and the interest loss only represents the cost of credit insurance. Open credit lines mean not only ability to earn trade discounts, but opportunity to take advantage of favorable markets when they appear, and protection against emergencies; the gains will far exceed the cost.

Banks are not public utilities, in the sense that all are entitled to access to their loaning functions. They are private institutions operated for profit, and it is their privilege to prescribe the rules under which they will loan. Borrowers do not confer a favor on banks merely by borrowing, whatever the state of the money market may be. Banks must have deposits which will be maintained or they cannot lend. The borrower who abides by the rules, placing the bank under obligation to him instead of putting himself under obligation to the bank, will profit in the end. The way to do this is to maintain, without lapse, balances which are more than adequate to justify all probable credit requirements.

Competition between banks for accounts frequently leads to an offer of unusual favors. Sometimes such offers overstep the bounds of sound banking practice. In such cases the borrower will do well to remember that while special favors may now and then be safely accepted, an extended relationship based on favoritism is undesirable. Conditions change constantly; banks, moreover, are human institutions, managed by men who are promoted or demoted, resign, die, or err, and are sometimes overruled by superiors. When management changes, a new personal equation must be written between borrower and bank. The best basis for a desirable equation is a "history of account" which shows that the borrower has, on the contrary, not enjoyed special privileges but has placed the bank under lasting obligation to him by invariably meeting all the requirements of sound banking.

V

The facilities offered by commercial paper brokers also deserve the thought of borrowers who use considerable sums of short-term credit. The "open market" offers an excellent auxiliary to adequate bank lines provided both its facilities and limitations are well understood. The activities of well-established brokers are national in scope; their ability to buy notes in one market and sell in another has made them a large factor in equalizing interest rates between different sections of the country. They have demonstrated that they can distribute an extraordinary amount of paper under adverse market conditions; there have been times in recent banking history when their market has been "easier" than the majority of city banks.

Borrowers should never attempt, however, to use the open market as a substitute for adequate direct bank lines. Indeed, practically it is impossible for them to do so, because one of the important factors upon which open market credit depends is the possession by the borrower of adequate bank lines. If borrowers fail to maintain such lines their paper will become unsalable. Commercial paper brokers do not have direct access to the federal reserve bank. They handle a large volume of paper for a very small commission, ¼ of 1 per cent. The majority of them do a very large business in proportion to their own capital investment; it is necessary that they should, with gross profit limited to this small commission. Their own net profit depends upon quick turnover, hence their capital must always be liquid. They cannot afford to have "frozen credits" in their vaults. For these reasons they cannot grant definite credit lines with the same assurance that member banks can. Moreover, they are forced to make quick salability their test of the desirability of buying the borrower's notes.

The salability of paper depends upon the same factors which determine its rating with the borrower's own banks, plus the factor of its repute in the open market, and minus the factor of obligation on the part of the banks. The good-will of commercial paper-buying banks is a valuable asset for any borrower. It can be obtained through the salesmanship of the broker, operating over a period of years, and backed by an honorable and successful record on the part of the borrower. It should be understood that the broker's salesmanship has a better opportunity to build a borrower's market credit if the account remains for an extended period with the same broker than if the borrower plays competing brokers against each other in an attempt to get rates below the market. When a borrower's name has become established as a desirable open market risk, he may rely with confidence upon this supply of credit. He may safely use the open market for most of his requirements if he maintains adequate direct bank lines and balances against emergencies.

Commercial paper (open market) rates are normally somewhat lower than going bank rates. The broker's charge of ¼ of 1 per cent, however, which is a straight commission, raises the net discount rate ½ of 1 per cent if the paper is of six months' maturity, and a full 1 per cent for a three months' maturity. Then there is an interest saving because the bank balances are not required against open market lines.

VI

The following ratios of adequate credit lines to maximum expectancy

Bank	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
A	$250,000	$250,000	$375,000	Open
B	250,000	250,000	375,000	Open
C	250,000	Open	Open	$375,000
D	Open	250,000	375,000	200,000
E	Open	250,000	375,000	175,000
Total	$750,000	$1,000,000	$1,500,000	$750,000

of requirements are set down merely as a guide to what constitutes conservative finance in this regard; they are not intended to cover all cases but to represent desirable finance by the average company.

1. If a borrower relies entirely upon direct bank lines, such lines should equal 125 per cent of expectancy.

2. When a borrower has established his name on the open market, direct bank lines may be reduced to 100 per cent; and when the name has been very firmly established, in some cases to as low as 75 per cent of expectancy, but very seldom if ever, below that figure. In this matter safety is the best policy.

The preceding table is intended to show correct use of direct bank lines in the case of a manufacturer whose minimum debt is $750,000 and maximum debt $1,500,000, which is reached in the third quarter of the year. Credit lines of 125 per cent, or $1,875,000 will be required. We will assume that the company uses five banks with a line of $375,000 at each bank.

By planning its borrowings and maturities, as indicated in the table, the company will have used its full line at each bank at some time during the year. This is always advisable because the bank will then learn to consider use of the full line as part of the borrower's normal requirements, and not in any sense unusual, or worthy of particular notice. The company will also have been entirely out of debt to each bank for a period of three months, demonstrating to each bank its possession of other sources of credit.

If this same company should use the open market, it might under very favorable circumstances, after its credit has been firmly established through a responsible broker, reduce its bank lines to a total of $1,125,000 and arrange its borrowings thus:

Bank	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
A	$125,000	Open	Open	$225,000
B	100,000	$225,000	Open	75,000
C	Open	Open	$225,000	225,000
D	Open	Open	200,000	225,000
Open market	525,000	775,000	1,075,000	Open
Total	$750,000	$1,000,000	$1,500,000	$750,000

Here again the principles of having each source of credit open for three months, and of using full lines at some time during the year, are followed. In this case the company "cleans up" entirely with the broker also during the year, which is an evidence of resourcefulness not only to the broker but also to commercial paper buying banks which keep close account of constant market borrowers. It is also worthy of note that two bank lines are entirely open in the third quarter when debt is heaviest and that if the open market should fail to absorb additional paper going into the third quarter, the open bank lines can be used instead.

VII

The overhead cost under the two methods of borrowing, assuming that going commercial paper rates and bank rates are identical, are approximately as shown in the table below.

Whichever method of borrowing is used, it is important that the obligations given to different banks or sold on the open market should be identical in form and security. If they are not, preferences between creditors are established. If certain notes are secured by collateral, they represent a priority over unsecured notes; if any notes bear endorsements, they constitute a stronger obligation than unsecured notes. Either practice will lead to the establishment of the weaker method of borrowing as the only one available. Banks will not long be content with less security than is being obtained by other banks.

VIII

Likewise borrowers should not attempt to discount both straight unsecured notes and bills receivable or trade acceptances. Under normal conditions receivables and acceptances represent the quickest assets, except cash, in a borrower's statement; in due course of business they become cash. If they have been discounted or pledged, the unsecured note holder will have a lien only against the borrower's merchandise and general credit.

In recent years considerable controversy has developed between advocates of general faith and credit borrowing (the use of unsecured notes) and trade acceptance discounting, as systems of banking. The act which established the federal reserve bank provided for favored discount rates for trade acceptance paper. However, the corporation treasurer need not concern himself with this banking question, but has only to select the system which best fits his particular business and his own borrowing requirements. It is important for him, however, not to be led into

First Method

Necessary bank lines 125 per cent of expectancy or..........	$1,875,000
Necessary balances 20 per cent of $1,875,000 or..........	375,000
Interest loss 6 per cent on $375,000 being total cost, or..........	22,500 per annum

Second Method

Necessary bank lines 75 per cent of expectancy or..........	$1,125,000
Necessary balances 20 per cent of $1,125,000 or..........	225,000
Interest loss, 6 per cent on $225,000 or..........	13,500 per annum
Commercial Paper Commissions ¼ of 1 per cent on $1,600,000 (assuming all notes have six months' maturity) or..........	4,000
Total cost..........	$17,500 per annum

a belief that under the trade acceptance plan, his borrowing power is limited only by the amount of business done for which acceptances are taken. In every business there is a ratio between invested capital and the maximum debt that can be carried with safety, which cannot be changed merely by adopting a different method of borrowing. There can be no doubt but that in the "sellers'" markets of 1919 a supply of trade acceptances was presented for discount out of all proportion to the credits which would have been extended to the same companies on their showings of current assets and capital investment. It is well to remember that this method of borrowing emphasizes volume of business rather than net worth as a basis for credit; to the extent that it does this, it is susceptible of abuse by business men who try to make their capital work too fast.

It should also be said that the question of trade acceptances versus open accounts as systems of sale and collection is not involved here.

IX

Let us assume that both methods of discount are open to the borrower whose affairs are under consideration; that is, we are not concerned with the situation where a second name is needed to make paper acceptable for discount. Our borrower is a successful manufacturer or merchant, with adequate invested capital and entitled to bank credit. He may borrow on straight notes or by discounting trade acceptances. He cannot or at least should not do both. The determining factors between the two methods will be these:

1. The length of the period of collection, compared with the length of the period of debt.

If the period of collection is short, let us say not more than 60 days at the longest, whereas the period of maximum debt is six months, the practice of discounting acceptance multiplies by three the number of necessary borrowing transactions. Instead of borrowing for six months on a straight note the borrower will discount three sets of acceptances. It will amount virtually to a collateral loan, with the privilege of substitution of collateral. If, on the other hand, the period of collection for which the acceptances run is four months or more, the trade acceptance becomes on this count quite as practical an instrument as the straight note.

2. The ratio between the volume of time sales as shown by the amount of accounts or trade acceptances receivable and the amount of the merchandise account governs the comparative borrowing power under the two methods. This can best be shown by examples.

FINANCIAL STATEMENT OF A.B.C. AND COMPANY, MANUFACTURERS

Assets		
Cash	$100,000	
Accounts or Trade Acceptances Receivable	500,000	
Merchandise	300,000	
Total Current Assets		$900,000
Plant, Equipment, etc.		500,000
Total Assets		$1,400,000
Liabilities		
Bills Payable		$450,00
Capital and Surplus		950,000
Total Liabilities		$1,400,000

FINANCIAL STATEMENT OF D.E.F. AND COMPANY, MANUFACTURERS

Assets		
Cash	$100,000	
Account or Trade		
Acceptances Receivable	300,000	
Merchandise	500,000	
Total Current Assets		$900,000
Plant Equipment, etc		500,000
Total Assets		$1,400,000
Liabilities		
Bills Payable		$450,000
Capital and Surplus		950,000
Total Liabilities		$1,400,000

The above statements are identical except in the Trade Acceptance and Merchandise items, which are exactly reversed. In both statements current assets are twice current liabilities, generally accepted as an adequate ratio. The ratio of accounts or acceptances to merchandise is 166 per cent for A.B.C. and Company, whereas it is only 60 per cent for D.E.F. and Company. Obviously A.B.C. and Company could discount its acceptances instead of straight notes, because it has sufficient acceptances to retire bills payable. D.E.F. and Company, however, only has $300,000 acceptances, and is therefore estopped from use of that system. Its borrowing power is greater through the use of straight notes. Thus the ratio of accounts or trade acceptances receivable to merchandise should be 100 per cent or more to give equal borrowing power under the trade acceptance discounting plan.

3. The supply of acceptances must be adequate to provide for all credit requirements.

Many borrowers not only pay cash, discounting all bills, but are fortunate enough to be able to sell a large part of their product in the same manner. The statements of such companies are likely to show small accounts or acceptances receivable in proportion to volume of business. Frequently, however, they will have considerable merchandise accounts, to finance which they must borrow, as, for example:

FINANCIAL STATEMENT OF G.H.I. AND COMPANY MANUFACTURERS

Assets		
Cash	$100,000	
Accounts or Acceptances Receivable	200,000	
Merchandise	600,000	
Total Current Assets		$900,000
Plant, etc		500,000
Total Assets		$1,400,000
Liabilities		
Bills Payable		$300,000
Capital and Surplus		1,100,000
Total Liabilities		$1,400,000

Volume of business: $3,000,000 per annum.

The above company owes $100,000 more than its acceptances receivable item, yet it has additional borrowing power on straight paper, without crossing the two-for-one ratio, of $300,000. Such a large proportion of its sales are for cash that it would find acceptance discounting entirely inadequate to its purposes.

4. If acceptances are to be discounted, the period of their supply must synchronize with the period of credit requirements.

The milling business, for example, borrows heavily when wheat is coming from the farms. This industry can borrow several times the amount of its own net working capital because wheat is such a sound and liquid asset. But it requires credit for the purchase of wheat long before its own manufactured product finds a market. It cannot rely, therefore, on trade acceptance discounting because at the time it must borrow it will not have any acceptances on hand.

The following statement, however, sets forth an ideal situation for use of acceptances.

X

The statement below shows the company's position at the beginning of its eight months' selling season. Its maximum debt will be reached four months later, after which time collections will equal new borrowings. The period of collection is four months, long enough to make acceptance discounting worth while. The company requires credit only for financing its four months' sales, so that trade acceptance discounting synchronizes with credit requirements.

One word in summary. The corporation treasurer is the trustee of the financial destiny of his business. However sound the business may be, however impregnable it may appear, however efficiently it may be managed in its technical aspects of buying, selling and producing, it can be seriously impaired and under some circumstances totally wrecked by bad financial policies which have their origin in unwise borrowing. The Sherman law has decreed that American industry shall be highly competitive. When we have a field day for financial mistakes such as has been recently celebrated, those who make the mistakes suffer cruelly while their competitors profit, at least relatively. It pays, therefore, to keep out of the tight places. If one must err, let it be on the side of safety and conservatism rather than of recklessness and danger. It is better to have too much credit than too little. It is better to use too little than too much. The reward may be delayed, but it will be sure and worth the waiting.

FINANCIAL STATEMENT OF J.K.L. AND COMPANY MANUFACTURERS

Assets		
Cash	$100,000	
Merchandise	400,000	
Total Current Assets		$500,000
Plant, etc.		500,000
Total Assets		$1,000,000
Liabilities		
Capital and Surplus		$1,000,000

Volume of business	$200,000 monthly for eight months, all time sales		
Period of manufacture	30 days	Maximum debt	$800,000
Period of collection	4 months	Minimum debt	None

THE SELECTION AND TRAINING OF SALESMEN

BY ERNEST T. TRIGG *

VIRTUALLY every company of account today has some program for the training of its salesmen, which is sufficient indication of the prevalent feeling of business managers on this question. The needs of business vary, and so plans vary, though all good plans have fundamental characteristics that are common. Strictly speaking, our own company has no cut-and-dried plan that may be applied in all cases, and, personally, I am against any set program of training, particularly for such an individualized calling as we, in our business, consider salesmanship. I am opposed to the class method, or any other method which I think tends to suppress individuality in the new employee.

The salesman, alone on the road, is an institution unto himself. It is his personality, his resourcefulness, his own genuine faith in the proposition that he is selling, that weighs for or against the product in his sample case. If the product is so exceptional, and the company back of it so vast and firmly established in the trade that a dumb man could represent it, why of course the story is different. But in keen competition such as we have the salesman, as a man, plays a part so important that we cannot afford to overlook him, nor in any event would we care to take chances by doing so.

Consequently, we regard each new man entering our business as a distinct individual problem, to be handled distinctly, even as if he were the only new man occupying our attention. We have no questionnaires, and no employment personnel that hires salesmen or any other employees above the plain laborer type. Interviews with applicants are personal and confidential, and as often as possible conducted by myself, or, in our branch offices, by the branch managers. We executives give time to this task because we look upon it as a major task of the business, and it has paid us through the steady growth of the company, year by year, and in a rising efficiency in our organization. As we employ, so we build; to build permanently we must employ carefully and wisely, keeping constantly in mind that it is as great a duty to insure the future of the company as it is to insure its present. An established, reputable business that fills a worthy need is not a fly-by-night venture; it is a force that should grow stronger with each new generation as a lasting stone in the economic and industrial structure of the nation.

II

I reveal nothing new when I say that our company, and every other company of any size in this country, is never overloaded with good men. The contrary is true: good men—I say *good* men—are urgently in demand. Right now we could profitably open several new branch offices—if we had men who had convinced us that they could manage those offices successfully. But since the men are lacking, or at least since they have failed to come forward, the company's expansion must await our discovery of them. Surely, then, no duty is more urgent than this painstaking search for and

* President and General Manager, John Lucas and Company, Inc.

development of potential executive talent. The very life of the business, of any business, is dependent upon it.

I believe that the beginner himself should determine what department of the business he should enter out of which to carve his future, and that he should base his decision purely on his likes and his dislikes. Forced effort, that idea of keeping on the job by sheer will-power just because a rule in the copy book says "work must win," is not the effort back of real success. Success in any undertaking is an outgrowth of love of one's job. The great ball-player is great because he loves the game with a love that has fired him to perfect himself in it; he cannot keep away from the ball lot; the feel of the bat makes his fingers itch, in season or out. So it is in business. When a man is so in love with his work that the days are too short and the nights too long, nothing in this world is heavy enough to hold him down.

Again, I have stated nothing that is new—nothing that is not as old as this old world itself. Yet, so common is our knowledge of this fact that too often we are prone to forget it. Or perhaps we merely do not go deeply enough into the young man problem—the problem, I mean, of getting him started right, to the advantage of all concerned. If he does not know just what he wants to do, or is best fitted to do—and the beginner very seldom does—he should be given an opportunity to find out before he is settled anywhere. The employer today owes this to his company and to the man. Take a boy with a talent for music and a longing to become a great musician. Turn him into a hodcarrier, and the world will lose twice: The building industry through an inefficient, indifferent workman; humanity through the loss of that workman's unborn music. It is an old, old warning, that of the futility of attempting to fit the square peg into the round hole; and yet business is full of square pegs being worn round on the corners to their detriment and pain, and of round holes being squared until they crack. The peg is damaged; the hole is damaged; and so the misplaced employee is a pathetic example of wasted energy, a liability to himself and to the company that employs him.

III

At least 75 per cent of the young men who have come to me seeking employment have revealed a distressing ignorance of themselves. They are almost totally without conception of what they are best fitted to do, and are equally at a loss as to what they want to do. Nor is the figure of 75 per cent exaggerated; it might be nearer 90 per cent, and it includes even the most promising graduates of our best colleges who have determined upon that broad sea, Business, as the sea into which to launch their fragile craft. They want "to enter business." Beyond that vague objective they have none. They are like the little boy whom the kindly old gentleman came across in the woods with a gun:

"What are you hunting for, Johnny?" the gentleman asked.

"I don't know for sure, Mister," Johnny replied. "I ain't seen it yet."

These men must be supplied with a definite objective if they are to get anywhere, if they are to give to business and to their families-to-be the best that is in them. They should be so guided that they may find that objective themselves—and that is what we, first of all, try to help them to do. However, we seldom reveal to the men the mechanics of what we are driving at. It is better to leave the man to

discover what is to be discovered by himself.

As the initial step in our plan we outline to the applicant, if he seems to be the kind of man whom we want in our employ, the four general divisions of a manufacturing enterprise:

1. The executive
2. The administrative
3. The productive
4. The division of selling

Briefly we sketch the functions of those divisions, and their requirements.

"Now," we ask, "which one of them appeals to you the most? Think it over seriously. You are making an important decision."

The majority of them snap at the last named, "selling." But this first preference of the candidate is not, however, always his final one. We have him make this seemingly definite decision then simply for the purpose of getting him thinking about himself along definite lines. He begins to ask himself, once alone, "Do I really want to be a salesman?" He talks the matter over with older men, all the time, consciously or unconsciously, trying to analyze his likes and dislikes.

Most young men are drawn by the lure of travel, of seeing the world, the romance of the selling game, that fictional picture obtainable from our best magazines of landing the big dealer who has held out for years, marrying his daughter, and of becoming an officer of the company over night. There is small attraction, offhand, to the routine grind of administrative work; the very name of the traffic department sounds technical and uninteresting; pronounce "statistics" and the word trips the tongue and imparts a dry-as-dust flavor. But selling! That to the applicant stirs his inherent love of action and adventure. He wants to be a salesman; but as a matter of fact he knows little or nothing of what salesmanship demands, of the bitter disappointments, the hardships, the nerve-killing experiences of the selling game. Still, as he has expressed a preference, whereas before he had none, we let his preference stand until he finds a better one.

IV

There are no rules that can be followed in the hiring of men, that is, in the sorting of the applicants. This is a plain exercise of common sense and good judgment, and no two employers' tastes run exactly alike. As to myself, I will, as a rule, hire any clean-cut, intelligent, normal young man who honestly seeks employment. I prefer the green man, young and without previous business experience. Such men most readily assimilate the policies and methods peculiar to our company; they become exclusively "Lucas men." When a man is experienced in the policies and ways of a competitor, or any other company, his training becomes doubly difficult: he must "unlearn," if I may use the word, what he has already learned—an almost impossible requirement; then he must learn a fundamentally old business over again, which he is not readily inclined to do. It amounts to a policy with us to recruit our salesmen from the ranks of beginners, an employment policy that we feel pays most consistently and surest in the end.

Once employed, the new man is put to work in whatever part of the organization is most convenient to us, regardless of what his stated preference for work has been. And there, into whatever job he falls, his self-training begins—an initial training

that is to take in the business comprehensively.

Gradually, as opportunity offers and as the man progresses, he is shifted from one kind of work to another. He serves as a clerk in the order department, and learns how to write orders accurately by rewriting orders of salesmen incorrectly written. He also learns the why and wherefore of that department—its special function toward the business as a whole and the necessity of co-operation with other departments. He puts in a week or two in the shipping-room and discovers the importance of such small details as correct addresses and spelling of customers' names; the credit department claims him for a time; then the traffic department, the accounting office, and so on until he has been sifted through the entire organization. He has come to see business in a new light, to grasp its details and varied ramifications, to appreciate the diversity of its opportunities and its needs; and sometimes, quite suddenly, he discovers that he does not want to be a salesman at all; he has found another kind of work that he likes, that he wants to keep on doing, and he comes to his department head eager in his desire to remain at that work.

In this sifting, or "finding" process, the business might be likened to a flat board bored with numerous holes of different sizes, and the men to a handful of various-sized marbles thrown upon the board. One rolls the marbles about over the holes, and as each comes to the hole that it fits, it drops through into the pocket below. That is the place where the marble, the man, rightfully belongs. He knows it by instinct.

Three out of every four who express an initial desire to take up salesmanship persist in that desire after they have worked through the various departments of the business. These men have confirmed their first choice. At the same time they have absorbed into their systems some of the spirit of the business—its personality, its traditions and ideals—and they have a first-hand practical knowledge of the parts that make the whole and the salesman's relationship to them. There is no need now to lecture these men on company policies and what our company stands for; they have learned these things for themselves, having discovered them as explorers in virgin fields. And bubbling over with what they have learned they are eager to take the road and pass on this information to customers, to sell more than mere goods—the company itself.

V

No sale is complete if it contracts simply for an exchange of money and merchandise. We sell paints and varnishes. Our interest in each can of the product is intact until the painter's brush has spread it upon a consumer's property. In the retail field, therefore, the dealer stands as a direct representative of the manufacturer to the public, the ultimate consumer, and if the retailer is to do justice to his position as such, he must be, morally at least, a loyal, tangible, and active link in the manufacturer's organization. We want salesmen who instinctively, spontaneously, will sell our company's policies first, and our company's goods second. We want salesmen who can make retailers into salesmen and work with these retailers, in a broad, intelligent way, as their sales managers. Such salesmen are not through when our product is safe on the retailer's shelves; they must see that product move, and help to move it.

But our new employee, to get back to him, has now confirmed his first belief that he desires to become a salesman. After a period of what might be called apprentice work in the office of the sales department, he is assigned to a territory of his own. He is not, however, left to shift for himself. The sales manager of the district, in person, stays with the recruit for two weeks. The older man becomes the beginner's traveling companion and adviser. Among other things, he teaches the young man what trains to take, how to get about most conveniently, what hotels are best to stop at, how to get suitable rooms at reasonable rates, how to approach customers, and all the details that make up the routine of the work as well as many of its finer points.

This help is immeasurable. Few young men, fresh from home and school, are experienced in travel. The advice of the older hand and his companionship insures their getting started right, with the right kind of habits, the system that keeps them most fit, efficient and up-and-doing. Of course, left alone they eventually would learn these things for themselves, but likely as not they would learn them all wrong; and in the struggle with details their minds would be off their real mission, learning to sell.

At the end of the second week the young salesman-to-be takes up his work unaccompanied by the manager. But each night, at the close of the day's work, he is expected to sit down in his room and write a long personal letter to the sales manager, telling him in detail everything that has happened to him during the day. These letters are not formal sales reports; they are friend to friend affairs, the more informal and friendly the better; and the sales manager answers them in kind, commending good strokes, counseling about certain customers with whom the salesman has had difficulties, suggesting in real friendly man-to-man vein.

Remember, the beginner very often is away from home for the first time on his own resources. He is in a work that is new, sleeping in strange hotels, seeing only strange faces, meeting with rebuffs. It is just plain human nature for him to want to reach out somewhere and feel the grip of a friendly hand. He knows the sales manager now, having had two weeks of close companionship with him on the road, and the personal letters between them usually cement valuable friendships—friendships that in turn cement the entire organization. We do not coddle these young fellows. We simply try to keep in mind while the seeds of their future growth are being planted that a business is no bigger than the men who compose it, and that men are men—not machines.

VI

After the first two months on the road the novice discontinues the detailed accounts of his experiences and limits himself to the regular sales reports to the manager. Now, almost entirely, he must draw upon his own resources, or to use a slang phrase, "buck the game on his own." This is a period of pure self-development that sharpens his initiative, keys up his self-reliance, and exercises his wit and ingenuity, though as a salesman he is still in the probationary stage.

Also, this is the weeding out period. It is now that the sales manager watches the recruit's work most closely. If the new man lacks spunk, he will become discouraged under this test and quit. If he lacks judgment, initiative, resourcefulness, confidence,

the fact will out. It is a test, in short, of his possible worth to us as a salesman, and upon it depends the question of his permanent employment. We do not expect any beginner to achieve wonders during this probationary period, but we do expect him to show promise and progress. He should do better, not worse, and if he cannot do better as the weeks pass, it would be unprofitable for us to keep him.

Holding up under the test, however, the recruit is again joined by the sales manager, usually at the expiration of two months after his first two weeks of personal instruction on the road. And if he is of the right stuff, he meets the sales manager bursting with questions. He is chock full of things he wants to talk over, get straightened out on, and the sales manager is the one person in the world he is most eager to see. The manager, too, is able to make a final check of his candidate, correct any errors that have cropped out in his work, and get him firmly on his feet. After this second trip with the man, the sales manager again leaves him to work out his own salvation until six months from the time he started. During this interval the sales manager, of course, watches his progress from his reports, carefully and constantly advises, counsels, and stimulates him. Then, should the manager decide that we really have a salesman, and should the salesman also decide that he has made no mistake in entering our employ as such, the man is sent to our nearest factory for three weeks' practical work and training.

VII

By "practical work and training" I do not have in mind work on the technical side of our business at all. The manufacture of paints and varnishes is a complicated chemical process. We do not attempt to teach our salesmen the first thing about manufacturing or shop processes. The man who buys paint for his house does not care an iota what that paint is made of. What he does want to know is the responsibility and experience of the manufacturer plus how the paint will wear, and how it is put on. The answers to these last two questions are what we want our salesmen to learn, first-hand, in our test and experimental laboratories. The new man is put into the factory and taught how to apply paint and varnish. His experience of six months on the road in actual contact with customers has taught him what the customers want to know, the questions that he should be prepared to answer, and he sets about qualifying himself on these questions. He is not put into a class, nor is he under any set course of instruction in the factory. The knowledge sticks better when the man gets it in his own way, and the only precaution that we take is to see that he gets the information he is after and gets it right the first time. Two or three weeks of this experience are sufficient in most cases, and from the factory the man goes back to his territory, a full-fledged salesman of our company. Does such training pay?

It has produced for us a sales force that is efficient, effective, loyal from the ground to the top, a force that has sold our goods in good years and in bad to the continued prosperity of the business. It is giving us our executives, insuring our tomorrows as well as our todays. More: Virtually every man—I can think of no exceptions—who has completed the general training here outlined has made a good, a reliable, a conscientious salesman. The men who are not salesmen demonstrate the fact before they finish the training course.

BUSINESS FORECASTING IN THE EDISON INDUSTRIES

III—THE CREDIT MANAGER—LOOKING AHEAD IN FINANCE CONTROL

BY EUGENE H. PHILIPS * AND GILBERT H. BALDWIN †

IT is well established that scientifically arranged budgets have not yet come into general use. Even though the government of our Nation has finally adopted the budget plan as the most effective means of handling the finances of the country, it does not necessarily follow that our commercial enterprises will fall in line. The idea is comparatively new. That is the chief objection—an inherent suspicion that it cannot be sound, simply because it has not been generally adopted. Operating officials may, temporarily, hinder a movement no matter how good it may be, if in their minds it is likely to introduce red tape.

It is a fact that among its many advantages, the budget serves to bring the activities of the entire corporation into more harmonious relation. The operating official who is deeply concerned in building up his own department will, at the same time, be very anxious to familiarize himself with the needs of the business as a whole. The construction and operation of a budget enables him to do this. The broad-minded conception of the general plan thus secured and a realization of the benefits it offers to the business cannot fail to promote a very hearty spirit of co-operation throughout the entire organization.

For the past 25 years the Credit Department of the Thomas A. Edison Industries has estimated in advance the probable cash receipts for the ensuing month, and for the past 8 years, it has estimated the probable cash receipts at least 60 days, and in a great many instances 90 days in advance with reasonable accuracy. In following this work through for so many years strict attention has been given to the following questions:

1. How is the money coming in? Will the cash receipts for the current month fall short or exceed the amount of your estimate?
2. What do you estimate next month's cash receipts will amount to?
3. On regular terms of 30 days net, how are your payments averaging and just how do you follow this?

Someone must answer these questions, so why not the credit man?

II

How is the money coming in? Right at this point let us think of the first of the month when the credit man handles the monthly statements of account. At this time the estimate for the ensuing month is prepared. Immediately after the statements are mailed a daily report is started to show the payments for the current month as compared with corresponding periods for the previous months.

If, by the fifteenth of the month, the receipts are not up to schedule, it is time to find out why.

1. Have any of the cash discount customers failed to come through?
2. Are some of the usually prompt 30-

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day accounts running along into the overdue period?

3. If so, what are the business conditions in the immediate vicinity or surrounding territory of the accounts involved?

4. Is it necessary for someone to see any of these concerns? If so, can a traveler handle the situation, will it be best for the credit manager to make the trip, or should the sales manager handle the situation?

Occasionally, in the course of a year, it will be found advisable for the credit manager to investigate the facts concerning the sales situation in a certain territory, and, by the same token, it will at times work out more advantageously if the sales manager goes out to investigate a credit situation.

The sales and credit managers of any concern must constantly work in closest harmony with one another. If there exists the slightest friction between these two officers, their concern is carrying an expensive load. A willing and competent sales manager cannot properly manage the sales for his company if he is compelled to work with an incompetent and disgruntled credit manager, and vice versa. Co-operation in its truest sense should at all times exist between the sales and credit man, if the business itself is going to prosper.

If you know of any concern that is supporting a sales and credit department where the work between the two departments is not being handled in the friendliest kind of fashion, then you can rest assured that financial fulcrum is not intact. This one point alone may explain why the money is not coming in.

For our purpose it is sufficient just now to consider that all departments are properly co-ordinated; that the money is coming along according to schedule; and that having prepared a conservative estimate, there is every reasonable assurance that actual cash receipts for the month will slightly exceed the amount of the estimate.

III

What do you estimate next month's cash receipts will amount to? Let us consider the date of the inquiry as of September first. August estimate has been fulfilled. The September estimate has been submitted but this does not go far enough. The financial man wants to know the estimated cash receipts for October. Right at this point, the credit man must become a true economist and set to work correlating some interesting figures.

Estimating the cash receipts some 60 or 90 days in advance is a problem of no mean proportion, involving as it does a thorough knowledge of the special conditions confronting the sales manager and the credit manager, and also a clear perception of the general conditions that will affect sales, credits, and collections.

The sales manager knows the value he would like to have shown as representing September business. He is, likewise, familiar with current schedules of production. Furthermore, he is well acquainted with the facts in relation to the potential demand for his product whether seasonal or otherwise. And so, assuming that no untoward conditions intervene, he figures that for the present, at least, it will be safe to estimate the value of September shipments at so much. This is the only set of figures that he can furnish the credit man to assist him in estimating the amount of October cash receipts.

The sales manager knows just as much—possibly more—about general business conditions than does the credit manager. But first of all, it is the sales manager's job to create the demand to dispose of the factory's maximum output. And it is largely the credit manager's job to be sure that the value of shipments does not exceed the customer's ability to pay promptly.

So, let us take the value representing the estimated October shipments and see what can be accomplished in estimating October cash receipts. Or it may serve our purpose to better advantage if we lay these figures aside for the time being and call for them a little later on after we have determined the direction of the line indicating past performances, i.e., cash receipts for previous months.

To determine the status of collections many schemes have been evolved. Most of these depend upon the relation between sales and accounts receivable through various processes of averaging over a period of months. For the graphic presentation of this relationship a chart may be prepared as explained below showing by a single curve the proportion between "Sales" and "Accounts Receivable" over any desired period.[1] First, obtain the average daily sales for the month past, next take the total "Accounts and Bills Receivable" for the last day of the month and divide the latter figure by the figure showing the average sales. If receivables are $800,000, and average daily sales are $20,000, the resulting figure is established on the chart. If the curve for the past month slopes up, collections have been poor; if it slopes down, they are improving.

Regardless of the proportion between Sales and Accounts Receivable over any desired period, the fact remains that total "Accounts and Notes Receivables" represent the actual amount outstanding. At the end of the month, it is interesting to figure the per cent collections as against the total amount owing at the beginning of the month.

If February cash receipts amounted to $250, as against $1,000, "Accounts Receivable" for the closing period January 31, it is plain that we have collected 25 per cent of our Accounts Receivable. Since 100 per cent is equivalent to an average of 30 days—our regular terms—and as 25 per cent represents only one-fourth of 100 per cent, the average collection period on a 25 per cent basis would be four times the normal, or four times 30 days, which gives us 120 days, representing our turnover, or average collection period.

So at any time by simply finding the percentage of collections for any given period as against accounts receivable as of the first of the month, the average collection period can very easily be determined by the simple calculation described above, or more conveniently by means of a table such as is shown below which can be worked out to such detail as may be necessary. This is a table of percentages based on collections against Accounts Receivable and showing relative number of days, representing average collection period or "Turnover."

Percentage of Accounts Receivable Collected	Turnover or Average Collection Period—in Days
1	3000
10	300
20	150
30	100
40	75
50	60
60	50
70	42
80	37
90	33
100	30

IV

The proportion of sales to accounts receivable is necessary information, but does it tell the credit man all that he wants to know? And then again ratios

[1] Described by Joseph W. Morrison, in *System* for March, 1918.

appear, usually, to fluctuate. If collections show 45 per cent of total amount outstanding over a period of a month, we know that payments are averaging 66⅔ days. *One of the most effective means of preventing this kind of a situation is to make sure the customers buy the terms along with the product.* If a man asks you whether 30-day terms are satisfactory and you say they are, is it not likely that he will strive to make his payments in keeping with the terms?

Of course, we all appreciate the importance and influence of the various credit factors, but is the new customer who carries a fairly good rating usually given the privilege of actually discussing this one point—that is his position in respect of payments. Printed order blanks are used by almost every concern of standing. The terms "30 days net" printed on the order blank carry an everchanging significance. The varying conditions of trade as we pass through the different phases of the business cycle will sometimes prevent the average concern from making all payments promptly on a 30-day basis. In other words, business conditions control to a large extent our various methods of making cash disbursements over a period of months or of years.

So, after all, is it not true that printed terms mean little or nothing? Is it not true that every day concerns are clearing through their respective credit departments a goodly proportion of orders from new customers—and customers who carry a fairly substantial credit rating—only to find later on when the 30-days' time has expired, that the customer never intended—as a matter of fact could not possibly arrange—to pay for the bill of goods until he had reshipped and collected?

This brings us to an important point that we do not often hear discussed—the almost flagrant practice of first passing the order and then selling, or at least trying to sell the terms after the outstanding account has been classified as overdue.

You may even find that to your mind, the man you have trusted has used poor judgment in passing along to some unworthy credit risk the credit you have given him. And is not this largely because you failed to discuss definitely the matter of payments when the order from the new customer was received? If a new customer finds you firm in regard to prompt payments, he will extend credit less freely to his customers in exploiting the sales of your product. You say this is a delicate situation? Very true, but what about your payments averaging 66⅔ days, as against regular terms of 30 days net? And the healthy condition of a concern's business is largely dependent upon that concern's living up to terms of settlement—something that it, ordinarily, will not do if the concerns it dealt with do not stress promptness in discussing the matter of payments.

V

The banker meets this same problem whenever he loans money and he handles the matter systematically. He realizes that he is responsible for the funds belonging to his depositors. You would not think much of your banker if he made a substantial loan to an acquaintance of yours when the condition of the business would not justify the loan. You would transfer your funds very quickly. Nor would you even attempt to negotiate a loan from your banker for any amount in excess of what your business justifiably called for.

In the first place, you would not consider it fair to your business associates—the other depositors supporting the bank. Some of these other depositors are, perhaps your neighbors

living right next door, across the street or around the corner. That is just the point—we are all neighbors and we should strive to help the neighboring customer in San Francisco with constructive advice, and we should try to ease the burden for our neighboring banker in Louisiana. The bankers of our land are justly entitled to the whole-hearted support of every dealer, jobber, and manufacturer in this country.

The United States first, but we can even go farther than this and help the bankers of every land. *One way in which this can be accomplished is for distributor and manufacturer to insist upon payments being made on some specific date.* The corporation has no more right to extend indefinite credit than has the banker. The manufacturer must borrow money from the bank to conduct his enterprise, but any funds negotiated for this purpose should not represent overdue accounts with time extensions. Quote your terms, then, with every order from every new customer; get acquainted with the treasurer through the purchasing agent. Do this when the order comes in and do not wait until the invoice is overdue. Precisely that is what the banker does, so why not the dealer, the jobber, and the manufacturer?

VI

The successful credit man usually insists upon the clearance of all orders through the credit department. He is, in fact, responsible for collection of the account the moment he approves the order. And it is essential that each separate order carry the credit department's approval before shipping requisitions are issued.

No matter what kind of a checking system may be in use, the credit manager, or his chief assistant, should make it a point to examine daily every order representing fairly substantial values. To the trained eye of the credit man little irregularities or indications that would not seemingly attract attention are quite enough to arouse suspicion, and frequently in such cases a little closer investigation furnishes convincing evidence that careful surveillance must accompany the handling of that particular order.

So, it is useless to look for up-to-the-minute collections if the new business coming in is not carefully adjudged in the mind of the credit manager. But this alone is not sufficient, for even while he is passing the order various unforeseen factors are developing that may serve greatly to hinder collections. It is therefore necessary, likewise, to follow the conditions at the points to which the product is shipped, with particular attention to the manner in which they will affect his business. This makes it difficult to estimate collections anywhere from 30 to 90 days in advance. It is always the uncertainty of what may happen that holds the credit manager's interest before and after submitting his estimate.

VII

To go back to the sales manager's estimate of September shipments—let us assume that this represents a value of $850,000, and that the factories can supply the necessary product. This represents the volume of shipments the sales manager would like to make. In this estimate the sales manager has doubtless included prospective business with most—if not all—of the customers whose monthly requirements average the heaviest. Are all of these customers in a financial position to take their commitments? On the first of September the credit manager must decide whether it will be prudent to

deduct say $50,000, from the sales manager's estimate because of these contingencies and because of conditions in some sections that may call for reductions in shipments to certain points.

It is the credit manager's job to venture into the future and prophesy what conditions will be one month or three months hence. Of course, no man can predict future conditions with absolute accuracy, but the more closely he follows his work and looks into general business conditions, the more closely will he estimate collections. After starting off September 1, with an $850,000 estimate for September shipments, and deducting $50,000 for contingencies, he has left $800,000, to work with. Figures might then be drawn off something after the following plan:

September 1, Accounts Receivables	$900,000
Estimated collections for September	765,000
Overdue September Accounts Receivables	$135,000
Estimated shipments for September	800,000
October 1, Accounts Receivables	$935,000
Estimated Collections for October	794,000
Overdue October Accounts Receivables	$141,000

Because September collections have been estimated at 85 per cent of the total amount outstanding September 1, that does not imply that October collections will also represent 85 per cent of amount owing October 1. In normal times a great many lines might reasonably look for more business and better collections in the month of October. But these are not normal times. Many concerns are just beginning to emerge from the process of rehabilitation. These concerns have been losing money, nibbling away at the reserves—where there were any—and just when business opens up and the need for working capital and credit becomes more urgent, they find themselves badly battered like a ship just in from a stormy sea. The tug boats in the harbor will have a busy time bringing in some of the hulls and a worse time bringing them up the river. The weatherbeaten tug boat captains—the seasoned and experienced credit men—will know how to help a great many of these concerns and will help them in a great many different ways if they will only give the signal.

VIII

The writers believe that the big job for the credit man is just about in sight; that the volume of business just about to break forth will exceed by a vast amount the values which the average manufacturer can easily afford to handle and, therefore, extreme caution will be necessary in extending credit and this even to the deserving and more reliable accounts. Past performances for the many have been thrown to the four winds and credit granting from now on and for some time to come will be handled more wisely. In fact it will be more prudently conceived if the credit man assumes the sound basis that everybody is just starting up in business, and his good judgment in granting credit will play an important part all during the winter months at least.

To be conservative, then, let us assume that collections for the month of October will not show any improvement over the September estimate or, more precisely, that we can reasonably hope to collect 85 per cent of the total amount owing October 1, $935,000 or $794,750, leaving $140,250 representing overdue "Accounts Receivables" as of November 1.

IX

Now, let us take up the "Overdue Accounts Receivables" as of October 1, $140,250, not yet accounted for. After analyzing this balance, we find that it represents accounts that are 30, 60, 90 and beyond 90 days overdue. Particularly, in respect of collections this overdue balance should constantly be carried in mind by the credit manager. He is charged with the responsibility of keeping it reduced to a minimum. He must decide just where to draw the line with some of these overdue accounts.

How will the overdue balance be liquidated?

When will it be liquidated in its entirety?

During the interim, what will happen to unfilled orders on hand for the account involved?

How far will the credit manager be inclined to go with the customers most urgently in need of assistance?

This is a situation which confronts every credit man, and for the solution, he must rely largely on his belief in the customer's ability to come through in the face of all kinds of odds. It is at this time when the customer needs assistance that the responsibilities of the credit man commence to multiply. He is concerned in the work of helping his own company sell goods, but he is likewise concerned in helping place the customer on a sound financial basis. This might mean temporary curtailment of shipments as, also, some constructive criticism and advice to the customer in respect of future plans. This is the time not only to protect the company's immediate financial interests but by tact and helpful assistance make the customer more than ever a friend.

The problem of bank collections as against "Notes Receivables" depends partly upon the judgment used when the notes were accepted. Assuredly, there exists a high point of uncertainty in the work of predicating collections as against the value represented by "Notes Receivables" in hand. To estimate the amount to be collected against them is almost impossible.

Whatever a firm's policy may be in respect of accepting notes, we will venture to say that for some time to come, at least, it will not be profitable to increase the balance representing outstanding "Notes Receivables." On the contrary, now seems to be the time, if possible, gradually to reduce this particular account. New notes might be accepted in the same proportion as the maturities on hand are retired or reduced. With plenty of new business in sight, it does not seem practicable even to think of time extensions or accommodations very much beyond the point of liquidating old business.

X

Many new concerns will organize as the result of improved business conditions. In this connection the point of fire insurance may be stressed. After all, what does a financial statement mean to the credit man when he is not informed as to the fire insurance carried on inventories?

A large number of comparatively small concerns are disinclined to devote the time to take an actual inventory and cover it with adequate fire insurance. Entirely too much reliance is placed on the local insurance agent. Not infrequently, these agents are not really versed in handling insurance problems. Probably it will be found that many of them have only very recently taken up the work along with real estate—all fine fellows and well meaning in every sense, but not insurance experts. True, they represent reliable insurance companies, but in many instances they fail intelligently to investigate the conditions involved

with the result that the policies are not, always, drawn up in the best interests of the insured.

Many an audit has been completed and many a financial statement rendered with but little, if any, investigation of fire insurance policies in respect of inventories. In particular instances, at least, where volume shipments are going forward to a customer, it should be incumbent upon the debtor to furnish reliable assurances regarding the validity of his fire insurance policies, as this is obviously just as important as the financial statement itself. If this point is stressed with a customer it may mean his securing more reliable and substantial insurance at a lower rate than he ever before has enjoyed; then if misfortune does turn in his direction, he will be the more secure and the better able to satisfy his creditors.

In some states the insurance requirements call for the insured to file inventories with the insurance policies at points located some distance from their own establishment. In fire insurance parlance this is known as the "Iron Safe Clause." In practice it works well, for in case of fire the inventories and policies are found in some safety deposit vault distant from the scene of the fire.

XI

If the terms of "30 days net" printed on the order blank carry an ever changing significance, what can be said concerning the terms of 2 per cent 10 days or 2 per cent off for cash, if payment is made within 10 days from date of invoice? For a concern with the ability to make prompt payments to send in belated settlements and deliberately deduct the 2 per cent cash discount in violation of the 10-day period, is nothing short of a grievous offense. There is nothing sound or commendable in a company policy that will encourage the arbitrary exaction of an unearned cash discount. Quoted on 30-day sales, 2 per cent at 10 days means that the purchaser is offered a discount of 2 per cent for a 20-day prepayment or more precisely 36 per cent per annum for the use of money—which is quite enough.

These terms mean that the seller is willing to pay 2 per cent for the use of the money within 10 days from the date of invoice. That, however, does not imply any willingness to pay the same price for the use of the same money while the buyer is using the money. To try to exact the discount on a later payment is not in keeping with the dictates of equity; no more so than if the seller should charge for goods that had never been furnished. In the long run, the concern that offers the best values is, likewise, the concern that will not tolerate flagrant violation of cash discount terms.

Just a word as to credit insurance. It is of course necessary to accept either Duns' or Bradstreet's decisions in respect to ratings. If credit is granted to concerns whose listed ratings fall below a certain minimum, you are not protected. In fact, you are in the same position as if you did not carry credit insurance. The annual premium also must be considered along with the other items. At its best it is an expensive proposition.

The theory of credit insurance seems to incline toward the belief that it is on the accounts carrying the higher ratings that big losses are likely to be sustained, whereas the credit man is inclined more carefully to watch the fellow with the lower rating—the one who is perhaps having hard work to make headway in the business world. With capable assistance from the credit man, it frequently happens that these smaller accounts, these little fellows

who do not receive cognizance from the insurance companies are, ultimately, developed into very substantial accounts.

As credit insurance is costly and in some ways inadequate, it seems expedient, therefore, to set up as a reserve for bad debts a certain percentage of the business handled each month—enough to more than provide for average losses without carrying credit insurance.

XII

Briefly summarizing—every phase of the credit man's work is related in a great measure to future happening. A credit man is, of course, always interested in what has taken place and in what is now happening in his business, but he is more chiefly concerned in what is going to happen. Like the economist, he always wants to know "why?" This does not, necessarily, imply that he always succeeds in securing the required information, but through diligent study and constant service he can acquire knowledge that will prove of material assistance in helping him along the way. This is well expressed in the following quotation:[2]

[2] J. H. Tregoe.

Business and credit skill—with an ability to detect underlying currents, economic causes, and effects and to determine upon trade ebbs and flows—is derived from study covering a wide field of subjects, and can never be obtained by the devotion of one's time alone to publications or materials dealing solely with immediate questions of the trade or craft.

Wonders will be accomplished if education progresses to such an extent that we find in the hands of the banker good books on history and not merely financial journals; if we find in the hands of the credit manager substantial books, and not merely a journal dealing with some one phase of business.

The broadening of vision of our people, of our business men, of our credit men, by general reading will give them greater happiness in their work, greater facility, directness, and accuracy in judgments and a greater joy in living.

The technique of credit involves all the intricacies of the business world. It is the science of business, itself, that has gradually developed a new profession—one that for the proper discharge of its duties requires a man of broad knowledge and experience and one who has, in addition, been endowed with a sincere devotion to his work in the credit craft.

BUDGET CONTROL CHARTS

BY C. H. STEPHENS *

FORECASTING the course of business with greater or less accuracy by analysis of past performances has, no doubt, been the outstanding single development of the scientific study of business during the last two decades. Financial and production cost accounting has advanced by leaps and bounds, so that the high standard now attained would scarcely be recognized by the accounting practitioner of former days. The facilities and information at the disposal of the executive of today give him a control and scientific direction of his business that was never before possible.

Among the instruments developed to assist in executive control of business the budget is one of the most valuable and probably the least known. A corporation working on a budget basis has a marked advantage over one that does not, and especially so under the difficult conditions of the last few years—the uncertain costs, falling material prices, high wages, high government expenses, and as a natural result, high taxes, overextension of credits, constantly receding export volume, and a very complicated foreign exchange situation. These, and other minor influences created a general lack of confidence which was followed by extended unemployment. Indeed, many believe today that without the check of our federal reserve banking system, a general collapse or panic would have been the only way in which our business readjustment could have taken place.

A cautious executive will meet conditions such as these by the following safeguards: Careful watching against overproduction, curtailment of inventories to the minimum, extra careful supervision of purchases and expenditures, and last, but most important of all, an absolute knowledge of his daily standing.

Budget control is almost essential if these precautions are to be taken. Many hard-headed, practical business men will say: "Budget sounds academic, is impractical, spells complication, red tape, and a lot of new forms and records." On the contrary, the budget is comparatively simple, is eminently practical, and gives, as nothing else will give, a predetermined control of all activities of a business, obliging every department head to put his plans in black and white and do so in figures. It gives definite direction to business effort—it means the setting of a goal, which—unless it is in itself a danger signal—means, if attained, business safety no matter what the economic conditions are.

II

It is not the purpose of this article to discuss at length how a budget is prepared and handled. It is rather to persuade the executive of the smaller corporation to work on a budget basis and show him a way of gaining its all-important business control without elaborate machinery or adding to the cost of his accounting department. A brief sketch of a budget plan may, however, be helpful.

The main foundation of any budget plan is a painstaking analysis of at

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least the last preceding full calendar year—three would be better. Next, it is necessary to select from the personnel of the concern a budget committee. The membership of this committee may be limited to three, representing production, selling, and administration, or this number may be increased if desirable by dividing production into material purchases and factory administration, and selling into selling and advertising. This, of course, is entirely suggestive, as the formation details of the committee are entirely dependent on local conditions and the available human material. Naturally those most closely associated with the active management of the business will be found in its membership.

The first decision of the committee should be the length of the budget period. This should be decided by the turnover or seasonal conditions of the business. For instance, a clothing business should preferably have a budget period of six months; a stove manufacturing business, a period of a year; a wholesale grocery business, from 60 days to 4 months; while a manufacturing business with a steady turnover the year round can be run on a 30-day budget basis. In fact, at the beginning the period should be as short as possible to permit adjustments which, no matter how thorough the preparation, will most surely be necessary.

III

About two weeks before the beginning of each budget period, all department heads should submit estimates of their expenditures for the coming period. It is best to have the men who are responsible for the expenditures make the estimates. The effect of the plan is much the same as putting them into a business of their own. They must work out what the results of their activities should be together with the amount of money expenditure necessary to produce the desired results.

The estimates having all been received, the budget committee meets and goes over them carefully. Differences of opinion are considered, increases and decreases are made as may seem necessary, and the budget is established. It is, of course, necessary that all members of the budget committee be thoroughly posted on the conditions in their own line of business and on the general economic conditions of the country at large. At least one of them should be thoroughly familiar with general financial conditions.

In preparing their individual estimates, members of the budget committee proceed about as follows:

The sales manager should plan to sell enough goods to keep the plant running at full capacity. He should determine which part of the line is apt to be most in demand; concentrate selling efforts on the most serviceable items in his line; assign quotas to each territory, and present a well-rounded plan to the factory superintendent, who will then determine a production program in conformity with the sales plan—this necessarily including the quantity of raw material and the rate of consumption so that purchases may be made intelligently and to the best advantage.

The financial results of the sales planned should be sufficient to provide the funds necessary to carry out the plans of the budget committee. In this connection the matter of terms must be considered. It may be that the sales and production plans are too ambitious for the company to finance and then, of course, they must be adjusted to meet the conditions.

Advertising appropriations are usu-

ally established on a yearly basis by the board of directors and the budget committee will have to be guided by that.

The administration budget is determined last, in conjunction with the selling and production plans.

In the succeeding discussion we shall assume a budget committee of five, comprising the purchasing agent, the factory superintendent, the sales manager, the office manager, and the advertising manager.

IV

The next step is to appoint a budget controller, who should preferably be the auditor of the corporation, unless some other executive is better fitted on account of his more varied experience. The budget controller will shape the reports in such a way that the daily budget standing is automatically established. Orders received and the shipments made (sales) are reported daily. In addition, it is necessary for a number of desks to make daily reports to the budget controller. These reports need only state the total amount chargeable against the subdivisions of the business as represented on the budget committee. In this instance the desks to report are:

1. The purchasing department which classifies all bills received each day, excepting only fixed charges which are reported by the general ledger bookkeeper.

All invoices for assets are listed separately and are not considered. A form for the report of this department is shown in Figure 1.

2. The cashier, who classifies all checks paid each day save those which are charged to accounts receivable or pay-roll.

3. The pay-roll department which reports weekly the distribution of the pay-roll.

Meanwhile on the first work day of the week the budget controller takes ⅙ of the prior week's pay-roll as an

Date: August 15, 1922.

To:

Budget Controller

Daily Analysis of Purchases for August Budget

	Expense	Assets	
Material.........................	$4,675.23	....	
Sales Dept......................	225.00	....	
Adv. Dept.......................	750.00	....	
Factory.........................	1,527.40	....	
Administration..................	....	$4,000.00	
Fixed Charges...................	$7,177.63	....	
Total for Day...........	....	....	$7,177.63
Month to Date..........	....	....	422,954.27
Grand Total............	....	....	$430,131.90

Figure 1. Daily Report of Purchasing Department to Budget Controller

approximate figure for that day and adds to this an equal amount for each day that passes making such adjustment as may be necessary when the actual figures are available.

4. The general ledger bookkeeper, who should establish once a month the amount of daily fixed charges against each department—such items as rent (space, if the building is the property of the corporation), insurance, light, heat, and depreciation.

All except depreciation which is charged directly against each department, should be pro-rated on a square-foot basis. A copy of this report must go both to the cashier and the purchasing department, so that they may omit from their own daily reports items taken care of in the bookkeeper's report. All of these reports should come to the budget controller's desk at a specified hour, and he will have them assembled on an audit sheet (Figure 2). These figures when totaled make a complete daily picture of the expenditures of the business.

V

A difficult problem encountered in the practical use of the budget is the bringing of the daily figures before the executives of the business and the budget committee in such a way that they may read and use them to the advantage of their departments and to the advancement of the business as a whole.

The clock charts presented in Figure 3 are the solution of this problem. They are the result of various experimental efforts to show the figures in a quick, readable, and at the same time, interesting way. The charts are very simple, give the needed information at a glance, and give it in pictorial form—the most forceful of methods—and not only in figures. This is a decided advantage, as there are still a great many corporation officers who do not want to take the time to study an operating statement or, perhaps, are unable to do so.

These clock charts are in a flat box 2 inches deep, 24 inches wide, and 50 inches long, divided into two halves which are hinged together, and is fastened by a latch and a lock, the key of which should only be in the hands of officers and members of the budget committee.

The box when opened shows five, small clocks on the left, headed "Advertising," "Sales," "Administration," "Factory," and "Material." Each of these clocks has two hands, one colored red (designated "A" on charts) and one black (designated "B" on charts). The subdivisions and figures

AUDIT SHEET - DAILY EXPENDITURES

August Budget

Day		Sales	Advertising	Administration	Factory	Material	Total
1		$226.00	$425.00	$100.00	$375.00	$4,216.00	
		85.00	6.75	15.00	87.50	567.30	
		60.00			67.25		*$6,170.80*
2		*311.00* 400.00	*431.75* 37.00	*115.00* 6.78	*529.75* 495.00	*4,783.30* 75.00	
		27.00	210.00	529.32		5,327.50	
						628.00	*$13,906.40*
3		*738.00*	*676.75*	*651.10*	*1,024.75*	*10,813.80*	

Figure 2. Budget Controller's Audit Sheet

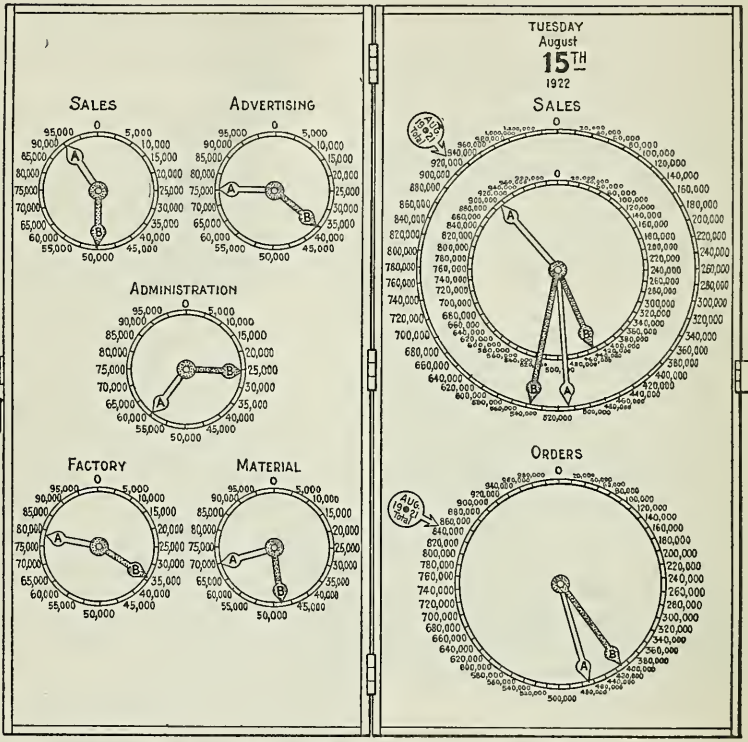

Figure 3. Budget Control Clock Charts

—indicating expenditures—are determined by the size of the business. The A hand points to the total budget allowance. This is set on the first of each month and remains stationary for the entire month. The B hand is set daily at the total amount of money spent by each department including the date shown on the daily calendar which is at the top of the right section.

VI

The two clocks at the right of Figure 3 represent "Sales" and "Orders." The upper clock has two circles and four hands. The outer circle is reached by two large hands, A and B. The B hand is pointed daily at the total sales for the month to and including the current date. The A hand shows the sales for the same month of the preceding year, to and including the date corresponding to the current date shown on the calender. To distinguish the hands, "1921" and "1922" may be respectively painted on the A and the B hands. The short B hand reaching to the inner circle shows the total of the five A hands on the clocks in the left section of Figure 3, that is, the total amount spent by the whole business up to and including the current date. The short A hand is pointed at the total budget allowance for the month. In addition, on the first of

the month an indicator, pointing to the total sales for the current month of the previous year is placed on this clock.

The lower clock represents "Orders" and has an A and a B hand which may also be distinguished by "1921" and "1922" respectively. The B hand registers the total orders received in the current month; the A hand, orders received in the corresponding month of the preceding year. This circle also has an indicator, which points to the total amount of orders received for the corresponding month of the preceding year. This is placed in position on the first of the month.

VII

What, then, do these clocks show when set for a certain day? The clocks at the left show by their A hands the total amount for the month allotted to each department; by their B hands, the total spent by each department to and including the date set. They show the rate at which each department is spending its money allotted, and how much remains if it wishes to stay within its allowance.

The "Sales" clock at the right shows:

1. The total sales of the year before
2. The sales to date for the current month
3. The sales of the same month to the same date for the preceding year

It also shows on the inner circle the total amount of expenditure budgeted for that month, and the total amount spent to date in the current month. The "Orders" clock on the right shows the total orders received to date both for this month and the same month of last year. A complete picture is thus presented, which practically amounts to a daily profit and loss statement, except only for the inventory or capital changes.

These clocks when carefully watched will give quick warning—much quicker than the showings of a monthly trial balance or operating statement—of any vital changes or even irregularities in the business. They oblige the budget controller to know each day the results of the business and its requirements. They also force him to be right up to the minute; to have all the information that is vital to the business at his fingers' tips.

Much depends on the daily setting of the clocks at a specified time, 11:45 A M being desirable, if the figures can be prepared by that hour. This promptness has a marked influence on the success of the budget plan, as it keeps everybody "on their toes" to see the clocks when set.

VARIATIONS IN CONSUMER DEMAND

ARCHER WALL DOUGLAS *

SO far as history and analogy are of avail in forecasting the future, it seems reasonably sure that the great uprush of prices during the war will be followed by a long period of declines tempered by occasional passing flareups. Among other things, this means that speculations in the regular run of business will be largely lacking, and that upon intelligent merchandising must principally center the hope of profit. The fundamental principle in merchandising is the turnover of stocks on hand carried to the *nth* power, since this implies the utmost volume of sales with the smallest amount of invested capital; also, both incidentally and logically, a system of economical and efficient management, as in this way only can such a result be obtained. It also implies careful stock-keeping and ordering, which are the product of ceaseless watchfulness and thorough acquaintance with all the details of the business.

Obviously slow selling goods on one hand, and the lack of desirable fast selling goods on the other, are heavy handicaps on quick turnovers. Therefore, there enters into the problem—the most interesting of its many phases—nothing less than the foresight which sees things before they happen, when something can be done about them, and not afterwards. When articles which have been in common use are supplanted by something different, or something better, they are liable to go very suddenly—to "die on the premises," there being, all at once, absolutely no sale for them. Then they remain as dead stock, to slow down the turnover, lowering the average to the extent of the amount invested in this dead stock.

I remember once going through the store of a dealer who was accounted very successful, and the thing that impressed me most was the presence in his stock, with no special effort to dispose of them, of many articles which I knew were going out of use. One did not have to be a prophet, or the son of a prophet to know that sooner or later the dealer would go broke, as he did inside of two years.

This early discovery or anticipation of approaching change requires long range perception—an unending study and analysis of the variations in demand brought about by changes in taste, or in material conditions, or in the nature and education of customers. The indication may perhaps be found entirely outside the line of business in which the individual is directly engaged. I remember one instance of this in my own experience when an important change in my own product was foreshadowed by changes in articles entirely foreign to my own business. At the time—many years ago—the rather glaring finish of the average photograph began to take on a more subdued hue, and the gaudy chromos that decorated every cottage wall began to give place to etchings and engravings. This was so general as to indicate a change of taste, and it was an easy prophecy—"elemental," as Sherlock Holmes would say—that the finish on builders' hardware, locks, knobs, and such like trimmings, which

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was my immediate problem, would shortly follow suit. Therefore, the part of wisdom was to be ready to supply the new and more sober finish as soon as the demand appeared, and equally to be ready to dump the still popular and high-colored builders' hardware which masqueraded under the guise of an ornamental, as well as useful appendage of the building.

Another similar instance was also in the long ago, when hunters were persuaded that wild ducks and geese could be shot successfully only with large bore guns, heavy charges of powder, and large-size shot. Some daring spirit, like another Columbus venturing into unknown territory, got tired of "toting" a heavy gun that kicked like a Missouri mule, and so experimented with smaller bore guns and lighter loads. The result was that he killed more ducks and geese than the other hunters. Now it was an easy analogy that this would spread to other lines, for changes of this nature are almost entirely due to an altered attitude of mind, and often, as in this case, embody some underlying principle. The use of the smaller bore guns was the expression of the mind that thinks for itself, that refuses to do as has always been done—that proposes to experiment with facts and be guided by the result. I was not surprised, therefore, to notice in time a gradual shifting in demand from the heavier to the lighter sizes of axes, and from the longer to the shorter lengths of cross-cut saws.

The usual explanation of this particular change was that steady deforestation had taken all the largest trees, and only smaller ones remained for which the light axes and short saws were entirely adequate. I had, however, in mind the saying of Sherlock Holmes, that the obvious explanation of a problem was always to be viewed with suspicion as it was liable to satisfy you and prevented any further study or analysis, and so keep you away from the true solution. Now the facts were, as I found upon further investigation, that the discarding of heavier axes and longer cross-cut saws prevailed alike where the larger trees had been felled, and equally in the remote forest fastnesses of Oregon and the Canadian Rockies, where the giants of the forests were still standing.

II

It is an interesting fact that widespread changes of this nature are final and never reverse themselves; they are distinct advances that have no ebb tides. It is not, therefore, a difficult matter to forecast changes in one line from the general trend or from specific indications in other lines. Given the growth of wealth and education in any section, you can easily get an intelligent idea as to the falling off in the use of tinware, and the increase in the demand for enameled and aluminum wares which will ensue. Or viewing the process from another angle, the decreasing or increasing sales of these lines of goods in any section tells you that education, intelligence, and the general welfare are spreading. The connection at first seems far-fetched and fanciful, yet it requires only a brief analysis of the nature and appearance of the goods to realize that they are used or not used, because of the taste and intelligence of the consumer, as well as because of his purchasing power.

Often the use of certain ordinary tools and implements is due more to custom and tradition than to any especial fitness. In such cases the passing of the mental attitude that is responsible for this condition first becomes apparent in the call for new

things. Not much over a generation ago there were certain imported English edge-tools and pocket-knives that found sale in certain portions of the South almost to the exclusion of other makes—not because they were any better, nor yet as cheap as those of American manufacture, but because they had the sanction of use since the days of the Revolution.

III

It constantly happens that some wide-sweeping change has its primal beginning in some insignificant cause that may perhaps escape notice. For instance, when the South began to be freed from the cattle tick, it was not a difficult task to forecast the startling changes that would follow. There were some prophets who could do this, but mostly they lacked audiences and were as the voice of one crying in the wilderness. It was perfectly sure that the days of condensed milk, and of imported "Goshen" butter in wooden kegs were over, and that in their stead there would be unlimited demand for ice-cream freezers, milk cans, and buckets, milk bottles, cream separators, and all the innumerable things that make up the dairy supply business.

Now of the fashions of dress and adornment, no man may say aught in advance, for they have neither rhyme nor reason in them—only the spirit of the Greeks in Athens in Saint Paul's time, which was ever for new things. Maybe that is why the fashion-makers set the styles in advance, and take no chances with public taste and inclination. But, conversely, it is true that great movements, reforms, and all manner of progress, carry along with them profound changes and effects in the simple things of daily life. When woman's emancipation got well under way it was perfectly obvious that it meant far more than the possibility of women going out in the world of work and adventure and making places for themselves. For the movement went far deeper and struck at woman's greatest burden; the deadly drudgery of household life that made impossible all pleasure and improvement to the great mass of womankind. There were those who saw this, because there was a greater market than ever for all the labor-saving appliances and things of comfort in the home. Most of these are still conspicuous by their absence in those savage and semi-civilized nations where the cave-man idea still holds more or less sway.

It was an easy prophecy when gas began to make its way that oil lamps were a good thing to get rid of, and gas lighting fixtures were good things to get into; that, later on, electric lighting fixtures were still better stock; that the natural sequence was from the open fire-place cooking implements, to the cook stove and its appurtenances with wood, coal, oil, and finally up to electricity as the needed fuel; that wash-boards must give way to washing machines, and chopping knives and wood bowls to mechanical food choppers; that running water would more and more be the accompaniment of every modern house; and that the old-fashioned bathtubs, and wash-stands, must give way to the comfort and sanitation of modern plumbing.

So the story goes until in things of utility the immediate problem of merchandising is, as to the things of efficiency and merit of labor-saving possibilities, to watch the trend of thought of the consumer, to keep in close touch with the appeal of attractive appearance and sanitation, and be ready at the right time to ring out the old and ring in the new. That is one of the best tests of modern merchandising.

EMPLOYEE TESTS

BY WILLIAM MARVIN JACKSON*

AFTER all that has been written and said by "experts" in character or vocational analysis it is small wonder that the average business man is somewhat prone to characterize the entire output on this subject as bunk. After listening to rival claimants denounce each other's system for measuring or detecting the various mental and moral qualities it is not strange that the majority of employers today seem to agree that psychological tests, character analyses, and the like are all right—for the other fellow. "There may be something in it, but—" is what the president of The Smith Manufacturing Company and the vice-president of The First National Bank are saying. And frankly one will hardly blame them. There may be some truth in the statement that business men as a whole are slow to recognize and use the discoveries of science or adopt improved methods of doing business, but after all, business is one field of endeavor in which the penalty of being wrong is failure. Many risks or dangers make a man careful. Many hazards make business conservative. The average employer more or less from the nature of things is "from Missouri."

It is rather unfortunate that this "from Missouri" attitude applies so strongly to the testing of applicants for positions, for there is probably no business waste as great as that resulting from poorly selected and misplaced employees. This does not take into account at all the other side of the story—the months and years thrown away by the boys and girls and men and women who are the victims of careless employment methods. It is indeed unfortunate that psychologists and other pioneers in the field of vocational analysis should have disported like patent medicine makers, each making exaggerated claims and declaring all other systems or methods to be of absolutely no value.

However, for some little time this has been man's way. Just let him discover the key-hole to something new and he soon imagines himself master of the entire territory on the other side. He is not content carefully and surely to prove his ground. If he finds a string that fits one bow he easily convinces himself that it will fit all.

But passing over the poor salesmanship, let us call it, of those who have been endeavoring to measure mental traits and capacities—the names of many could be mentioned who deserve great credit for practical results already achieved—the questions that concern us here and now are: Should we allow the blunders and false steps of the past to block further progress in this most vital matter? What has been discovered or produced which can be counted upon now? To what extent are the ordinary everyday methods wrong, and to what extent will they be replaced by carefully worked out "scientific" methods?

At the outset it might be set down that judging human mental traits or qualities will in all likelihood never be an exact science. Few would place a limit upon what man may do with matter, whether that matter be steel

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or flesh. But as long as man is human he will meet with a limit in his dealings with mind. And it should also be noted that as compared to man's progress in other directions his knowledge of the mind and its workings is most meager. As will be pointed out later, a few things have been learned which can be put to practical use in business, but when we consider the vastness of the subject it ill-behooves us to brag about what we know or be too cock-sure about any present method or system.

II

Psychological tests are perhaps the best known of the so-called scientific methods of appraising persons. They ignore exterior. They have nothing to do with outward shapes or appearances. They can be either oral or written, though for practical purposes written tests are more common. They seek to measure mental power as distinguished from actual knowledge. They must ignore experience and training. To take a written psychological test one must, of course, be able to read and write, but all factors which relate to particular information on any subject must be eliminated. The reason for this is obvious. If I am seeking to discover which of three prospective office boys is most alert mentally I give one an advantage over the others if my test mentions or deals with certain facts with which he alone happens to be acquainted. It is this particular point which makes the creation of pure psychological tests extremely difficult. Many tests have been produced and put forward as psychological which utterly ignore this principle and hence have no claim to the name. Usually such tests, if capable of classification, are simply trade tests.

Of all the various psychological tests which have been produced, those which may be considered most successful for business employment purposes seek to discover or measure:

1. Mental capacity
2. Mental dexterity
3. Power of imagination

Mental capacity tests were originated by Trabue. They consist of a number of incomplete sentences—that is, sentences from which certain words have been omitted—and within a given time the person taking the test is expected to supply the proper words. This is a simple example:

Every......man does not......to fight for his......in time of war.

A most important factor in a test of this kind is the time allowed. The determining of the proper time to be allowed for a test of, say, twenty sentences for adult minds can be arrived at only after long and carefully considered experimentation.

Mental dexterity tests, as the name implies, seek to measure mental dexterity or alertness. For business tasks requiring alertness and quick thinking, rather than the ability to solve hard problems (mental capacity) they serve a distinct need. The two physical traits comparable to mental alertness and mental capacity are quickness or nimbleness, and strength, such as is required, for example, in lifting a great weight. Mental dexterity tests vary considerably. A number of very good tests of this character have been worked out and used with satisfactory results. Here again the time element is important. The writer has before him a typical test of this character produced by a psychological research bureau. In common with all dependable tests it has been carefully tested and standardized, that is to say,

it has been given to a great many business employees and the ratings attained compared with independent ratings, furnished by employers, these ratings having been based upon actual performance; and in addition, age limits have been fixed, instructions for grading have been determined upon, and the time to be allowed, decided. The test comprises five different types of simple problems, examples of one or two of these are given below:

Write the opposites of the words in this column, as shown in the sample:

Good—bad
Young—........
Wet—........

A second type consists of simple arithmetical problems, such as:

If a train travels half a mile in a minute, what is its rate per hour?

A third type has been made the butt of a good deal of fun-making:

Notice these three words: *Hat, Rose, Apple;* with your pencil draw a line under the word that indicates a fruit; then draw a line through the shortest word; and now draw a circle around the word meaning a flower.

If Italy is a colony of America, place a cross right here........; but if not, place the sum of two and five here.........

The purpose of the imagination test is to assist in discovering potential executives. Of course it is quite true that some business executive positions demand little or no power of imagination. But ordinarily speaking any executive directly or indirectly concerned with business-getting problems, or more or less responsible for formulating the plans and policies of the business should have some imagination. It is quite possible that this quality is a far more important one than is generally admitted; and very often what is termed good, hard business sense contains a greater mixture of imagination than is apparent on the surface. A famous bank president once said that if in selecting prospective officers it was necessary for him to confine his specifications to one quality he would without hesitation name imagination. It would seem, therefore, that a dependable test of this character would prove a valuable asset, not only in selecting new men for executive or semi-executive positions but also in picking the right men for promotion to such positions.

Tests of imagination are possibly the most difficult of all to devise; and likewise the basis for grading such tests has not been easily arrived at. However, very good tests have been produced, some of which are in use today in a number of large concerns. Following are two of the six questions constituting one of the best imagination tests. The time allowed for each question is three minutes:

1. Mention as many methods of locomotion as you can, not now in use, which might be devised or developed.

2. If all persons had exactly the same tastes with reference to styles of dress what changes would take place in commerce and industry?

III

Passing from psychological tests we come to the method of sizing up people, called character analysis. The character analyst, as the name implies, does not confine his observations or "findings" to mental traits having to do purely and simply with ability or mental power as does the psychologist. He goes into the realm of the moral and seeks to pass judgment upon will-power, dependability, and the like, though from a purely vocational standpoint he would assign second place to this particular phase of his

work. The character analyst deals with exterior, with outward appearance. The few questions that he asks are oral. He works on the theory that all, or the major, mental, and moral traits or qualities are reflected in a person's physiognomy, hence he is sometimes called a physiognomist. His judgments are based largely upon facial observations, including the ears, nose, eyes, lips, chin, etc., though skin texture and color also have a place in his estimates. In general the physiognomists are of two schools: Those who seek to interpret one's present mental and moral characteristics, and those who deal rather with potentialities. The methods are practically identical, and both have a common object, namely, to help the individual find his proper field of work; but the former are perhaps more conservative than the latter. Whereas one would say to a subject, "*You've* been practicing law," and then proceed to his suggestions and conclusions, the other would say "You should be a lawyer."

Character analysis is somewhat akin to and is no doubt a development out of phrenology, a science, if it may be termed such, which dates back some hundreds of years. While phrenology is undoubtedly the father of modern character analysis it must be stated that most modern character analysts apparently make no pretentions to a knowledge of phrenology, and in fact, ignore it altogether. For whereas the phrenologist concerns himself with the top of the head only, going no lower than the middle of the ears, the character analyst, as a general rule, goes no higher than this point.

In this article, interpreting handwriting, or graphology, and palm-reading need be mentioned only briefly. It may surprise some to know that both are made use of today in business, even though the extent be rather limited. While the writer knows little about either he is of the opinion that outside possibly of one or two general indications little dependence can be placed in them so far as the interpretation of mental or moral qualities are concerned. Judging one's handwriting as *good* or *bad* with a particular position such as bookkeeping in mind is, of course, an entirely different matter. Likewise, the *size* and *shape* of one's hands and fingers (without reference to the lines in the palm) have a fairly distinct vocational significance, it being possible in the majority of cases to distinguish between the mechanical and the non-mechanical types. The person with *decided* mechanical bent as a rule has large, broad hands, with fingers correspondingly large, and flat and blunt at the ends.

IV

Trade tests are tests which seek to discover a person's specific knowledge of a given job or type of work. They are not unlike examinations given in school or college in history or mathematics or English. However, in addition to testing knowledge or information some trade tests endeavor to measure reasoning power, business judgment, and actual performance ability. It is the opinion of the writer that of all tests as at present developed, trade tests have the greatest practical value in the everyday selection of employees. For while the factors of mental capacity, mental dexterity, (for some positions)—imagination, character, stability, etc.—can by no means be ignored, the first, if not the chief, concern in filling a particular vacancy is the applicant's actual knowledge of the work to be done. His present performance ability must be ascertained.

Trade tests are of two kinds, general and specific. The general tests are slightly suggestive of psychological tests in that they assist in determining which of several types of work the applicant can best perform. The specific tests try to find out how much an applicant knows about a *particular* job and how well he can perform its duties. When an employer, in selecting an adding machine operator, gives a number of applicants a column of figures to add in a given time, he is giving a trade test of a specific character. This is also the case when the employer dictates a letter to a prospective stenographer.

As ordinarily practiced, however, tests of the character mentioned are not sure indications of the performance ability of the applicants. This is true for a number of reasons. A thoroughly dependable trade test must be a standardized test. Consider the matter of testing stenographers. A second-rate stenographer might do better on a letter containing technical terms or words with which she may happen to be acquainted than a really superior girl. The letter to be given is therefore an important consideration. Then, of course, the letter should be dictated to all applicants at exactly the same rate of speed. The time taken to transcribe must be noted. The familiarity of the applicant with the typewriter is another factor. And last, the relative importance of errors made should be fairly considered. A standardized test is one that has been so thoroughly tried out and tested that specific instructions covering these points can be followed and depended upon. Such a test makes it possible for the employer to ascertain the relative performance ability of a number of applicants without having imposed any handicaps or unfair conditions upon any candidate.

V

It is quite possible for any employer to develop specific trade tests for the various types of work performed in his business, but, as the above would indicate, considerable care must be exercised both in their preparation and in working out fair methods for giving and marking them. The usual method of trying out a proposed test is as follows. Let us say that the employer has worked out a test which he desires to use in selecting bookkeepers who can best perform his particular bookkeeping tasks. He asks his head bookkeeper and his assistant to rate the present bookkeeping staff independent of one another; that is, they will put down in one-two-three order the names of the men in accordance with their opinions of the bookkeepers' relative ability as judged from observation of actual performance over a period of time. These independent ratings are then compared and adjusted according to the combined judgment of the two chiefs. As a matter of fact there will ordinarily be little difference in two ratings of this character because the performance ability of a number of bookkeepers is pretty largely a matter of record. The proposed test is then given, and the men rated according to the marks attained. The test rating and the department heads' rating are then compared. If the correlation is over 50 per cent the test may be termed a satisfactory one, but the degree of dependence which may be placed in the test in selecting new bookkeepers is in proportion to the extent that the correlation exceeds 50 per cent. If the figure is 80 or 85 per cent it is a good test.

VI

Now if it were not for the fact that progressive employers are concerned

with the future possibilities, as well as the present value of new employees, as well as interested in moral traits, the trade test alone would serve the business needs. Of two prospective clerks of about equal knowledge of the work to be performed the intelligent employer will select the one which gives better promise of developing into something better than a clerk. If the psychologist or the physiognomist or both can assist the employer in distinguishing the latter from the former it would seem to be the part of good business to make use of their services.

While it is not the purpose of the writer to enter into a discussion of the relative merits of psychological tests and the interpreting of physiognomy in the selection and placing of employees it is not out of place here to point out the present-day limitations of both. Let us assume for the moment that both the psychologist and the physiognomist can do all that they claim they can do with reference to determining the mental and moral qualities or traits of a given individual. They are immediately confronted with the problem of telling this individual exactly the type of work he is best fitted for. Their advice in this respect is largely guesswork for the simple reason that the exact qualities required in the thousand and one different lines of business endeavor have never been scientifically determined. Many vocational counsellors will doubtless protest strongly the truth of this statement. But the fact remains that only in a most general way, and then with not any too great surety, are the specific qualities demanded by a given vocation known.

Take, for instance, selling. The writer has never talked to any two salesmanagers who were in exact agreement on what to look for in selecting salesmen. Moreover, when a vocational expert says to John Jones —"You are a born salesman"—he has unquestionably told Jones something of great value if Jones is a born salesman; but Jones has no better idea than before as to *what kind* of selling he should attempt. There may be certain fundamental qualities common to all sales positions, but a man might be a star at selling vacuum cleaners and a dismal failure in selling advertising.

One other illustration: The writer recalls a visit from a young man who had been told by a leading physiognomist that he should be a journalist. Passing by the rather interesting fact that upon inquiry it was revealed that outside of school compositions and letters the young man had never written a line in his life, how did this vocational counsellor know that he would make a good reporter—the position he had been told to seek? While it is true that many successful writers started as reporters, it is equally true that many capable literary men were absolute failures at newspaper reporting. And it is also true that many excellent reporters rarely ever get their "stuff" in the paper as written.

VII

Progress in analyzing the qualities required by the many different types of endeavor is being made, but slowly. An organization, backed by leading psychologists—among them college presidents—is now being formed, one purpose of which is to hasten this work. Trained investigators will go into business houses and with the assistance of business executives determine with the degree of accuracy possible the qualities to look for in applicants for the various positions.

If it is determined that for certain work mental alertness is a chief requisite then the mental alertness test would be a proper aid in selecting persons for this work. But any mental alertness test used must be carefully checked up somewhat in the manner described for testing the proposed trade test for bookkeepers. This is quite an important point. Even jobs that go by the same name vary more or less in different business houses. The remarks in a previous paragraph concerning selling apply here. The writer once spent several months testing six psychological tests that had proved their value in other businesses similar to our own. The purpose was to ascertain whether or not the tests could be depended upon for selecting men for our own particular jobs, with their peculiar methods and routine, and also to ascertain which test was best for each job.

Once a psychological test has proved its value in connection with particular work any intelligent clerk can give and grade it. And it is just here that psychological tests have an advantage over character analyses. The physiognomist cannot relegate any portion of his work to one who is not a physiognomist. Twenty or a hundred applicants or present employees can be tested at one time by means of psychological tests, whereas the physiognomist must spend a few minutes, at least, with each applicant or employee. It is also apparent that testing the value of the analyses of the physiognomist by the process of comparing his ratings with those of department heads or executives is a rather cumbersome process. Moreover, when the psychologist has been at work he leaves something—actual tests—which can be used and applied after he has gone. The character analyst can leave nothing which another may use.

The business psychologists make no claim to measure or appraise such traits as dependableness, application, industry, temperament, and character. The physiognomist does. If, as would appear from the work of a number of leading exponents of character analysis, he can appraise these qualities with a fair degree of accuracy the physiognomist has something of real value to offer the business community.

VIII

It has been the observation of the writer that both psychologists and character analysts are prone to ignore some very practical considerations and aids in their selection and placing activities. As a result, employers of long experience can sometimes detect characteristics which the experts either overlook or else follow in a roundabout way to discover. It would, therefore, seem to be of interest and value, in conclusion, to set down some of the factors which must be taken into consideration in selecting persons for particular positions, and suggest the proper method or methods by which these factors can be determined or solved.

Factor	Method of Determination
1. Age	Matter of record. Application blank. Can, of course, be verified
2. Education	Matter of record. Can be verified by reference letter to school or college
3. Experience	Matter of record. Can be verified by reference letter to previous employers

4. Performance record in previous positions	Statements of applicant. Checked up by referring to previous employers
5. Nationality, religion, citizenship	Statements of applicant. Can be verified in various ways
6. Residence	Matter of record. Can be verified by inquiry
7. Knowledge of and ability to perform work to be done	Trade tests
8. General intelligence	(a) Interview. Replies to questions, etc. (b) Statements of previous employers (c) Psychological tests (d) Character analysis
9. Specific mental qualities required for the work, such as, alertness, mental capacity, imagination, system and speed, ability to follow directions, etc.	(a) Psychological tests (b) Character analysis
10. Prospect of stability	(a) Previous employment record (b) Character analysis
11. Sociability and temperament	(a) Statements of previous employers, teachers, and acquaintances (b) Interview. Character analysis
12. Appearance and personality	Interview
13. Moral traits—character	(a) Interview. Character analysis (b) Statements of previous employers, teachers, and acquaintances
14. Physical fitness	(a) General appearance (b) Record of previous disability (c) Medical examination
15. Home surroundings and influences	Inquiry
16. Ambition, studiousness, etc.	(a) Previous employment and study records
17. Salary to be paid	(a) Standard for the position (b) Applicant's previous earnings

OFFICE CONTROL—KNOWING OR GUESSING?

BY HAROLD B. WESS *

THIS is the problem of the executive: How to keep from being so close to things as to lose their general perspective in terms of the whole organization, and yet still to keep control over the ever-elusive, ever-treacherous details.

The office is the most important part of any business. It is that branch of the organization most indispensable to the chief executive. He depends upon it for information which, more than any other element in the business, guides him in the promulgation and execution of his daily plans. This is true especially of the modern progressive executive who works on facts and not by rule-of-thumb theories—a method so often termed "practical."

Ignoring or overlooking its importance the average executive is impatient with the office. He considers it a necessary nuisance—a non-productive overhead. Yet, if properly controlled the office is, as stated, even more valuable to him than any of the so-called productive factors in his business. All are necessary, but the properly organized office has it within its power to reflect the daily working efficiency of every part of the organization whose operations and accomplishments it measures and records. Any weakness or breakdown in the office, therefore, is a serious blow to the successful operation of the whole business.

The office must, however, be properly organized and controlled if it is to be of the greatest value. An alert business thrives only on "hot" information. This finished product from the office is the combined result of a multitude of office operations and details whose proper control is much more difficult than the control of the operations of any other phase of the business.

II

The average office is not well controlled. In practically every office the division head is always in fear that something may go wrong in his division and the department head is constantly in doubt as to the actual standing of his department. Weaknesses in the office machine are not discovered until they are revealed by a serious breakdown—after the damage is done. Data are not available at the moment when desired, or are inaccurate because prepared under pressure and anxiety—and their lack or inaccuracy cost an organization much more than a "poor buy."

The usual trouble with the office is that it is swamped by an enormous quantity of detail which no one outside of the office either understands or wishes to understand. Very often this mass of detail, which is always in danger of slipping from control and treacherously upsetting the whole office, warps the office executive's vision. If all of his energies are absorbed and made tense by the constant dread of details, how can he maintain the necessary calmness and vision in his daily work of administering the business?

Our problem, therefore, is to establish an automatic control over these details which will release the energies

* With R. H. Macy and Company, Inc., New York City.

of the office head for constructive vision and make the office a reliable source of solid information and advice which will inspire the chief executives with a feeling of comfort and confidence.

Let us consider another aspect of this problem of the working efficiency of the office. A breakdown in a machine is not as a rule an accident, neither is the breakdown in any office routine accidental. As in the machine a sudden collapse is usually due to the failure to repair in season a rapidly developing weakness, and as the ruin of a person's health is most often the result of a continued neglect of obvious health requirements, so is a breakdown in office routine due to the failure to remedy in time daily irritations and defects—small perhaps at the outset, but developing or accumulating into a complete breakdown if not attended to early enough.

III

The measures we must take to prevent breakdowns and loss of control of the office machine are two:

1. Periodic examinations and overhauls
2. The utilization of recording devices and instruments

We should make periodic examinations of all the office operations just as we regularly take inventory of stock or overhaul our machines. Care should be taken, however, that these periodic office overhauls be not too costly, particularly if we make them frequently. Another danger of such periodic overhauling we should guard against, especially when in the form of job analysis, is the tendency to change procedures too often.

Material may be filed properly in many ways, each almost as satisfactory for the current needs as the other—although one may excel another theoretically or even practically. To change to the better method may, however, cost more than the improvement warrants. This same thing is true of many other changes in office procedure. The tendency to flare up at the least mishap in a division and order a change in procedure is even a greater failing in an organization than the inertia to progressive changes and improvement.

It is safe to state that many changes in office procedure are unwarranted. There are, as already suggested, many correct ways of arriving at the same result. An unbiased inquiry will usually show that the failure of the current procedure has been due to the fact that those responsible did not comply with its original intent and the original instructions. There may be nothing inherently wrong with the system. We follow the practice of the dishonest physician who treats his patient with pleasant medicines and does not ferret out the cause of the ailment, when we change procedures or systems in the office before we ascertain whether the requirements of the present procedure have been complied with one hundred per cent. Much time, labor, money, and the confidence of all concerned may be saved, if we never condemn any office system until it has failed, after a fair trial in accordance with the instructions outlined when it was installed.

Periodic overhauls, then, will reduce the number of breakdowns, but *will not* eliminate them. Moreover, they may be too costly if a weakness has been allowed to develop to a degree where a complete replacement becomes imperative. Evidently, therefore, by themselves they are not sufficient. Some method of control must be installed whereby it will be possible to keep posted daily on the

exact condition of the office machine.

Have we any warning signs for our office machine, which like the daily gasoline consumption of a bus will be an indication of the office's working efficiency? Can some check be invented to prevent the numerous details from getting away from us and wrecking the machine? Even if the work is finished daily as per schedule, what guaranty have we that it has been done in accordance with instructions? Can we honestly sit back and say that nothing can go wrong for more than a few hours without a warning signal staring us in the face?

The office manager or chief executive should be able to do this. He should be able to sit in his office and have, in effect, a "ticker" before him which will notify him at once of any leak or weakness in his organization. He should not be dependent upon the casual question—"Are you up to date with your work?" His "ticker" should tell him every hour of the day news of the quality and quantity of the work performed as well as that left undone and the reasons why it was not done. It is only when this is true that we can say that the executive has control over all the functions falling under his jurisdiction. Hence, the immediate problem to consider is how to develop and maintain this "executive control" in an organization.

IV

In order to develop an executive control that will be a real "control" of the operating efficiency and condition of an office, the following essentials must be observed:

1. Secure a temporary inventory of each office job as a guide to the flow of work within each department, and from one department to another. The writer has prepared and used for the purpose the questionnaire—"A Record Of Each Individual Job," shown in Figure 1, page 700.

2. With this questionnaire as an opening wedge into each job, it is possible to approach a department with a substantial knowledge of the controlling information desired.

This close investigation should not be made from the point of view of the usual job analysis but from that of the executive control for which it is to be used.

What do we want to know?

1. We should know the time when certain jobs, audits, reports, compilations, etc., should be finished daily, and the time they are actually completed. If a series of reports are to be turned over daily to another department at 3:00 P. M., and the daily records show successively 3:30, 4:00, 4:50, 5:15 etc., as the time at which the records were turned in, the tendency of being regularly behind schedule will, sooner or later, find the division in question swamped. The division is either working with too small a personnel or there is something slow and cumbersome in the execution of its work. If the time record of the completion of each process is followed in a vertical column day by day, the tendency to fall behind schedule will become quite obvious, and a subsequent investigation will reveal either of the two reasons mentioned above as its cause.

2. Of several hundred or thousands of items of each kind received by the division for audit, checking, comparison, or some special handling, we must know how many are completed and how many are left uncompleted. In some office work, such direct control as the number of items received, the number completed, and the number unfinished, is possible. In a great deal of the work the processes are continuous, and while some items are

A RECORD OF EACH INDIVIDUAL JOB

....	....	....	....
Division	Main Job	Special Job	Name

Note: Please answer each question briefly, in one or two words

1. List below all the forms, lists, papers received, and what you do with them

Form No.	A............	B............	C............	D...............
Name of Form	....	....	....	....
Time of Day Received at	....	....	....	....

II. List below each form, what you do with it, and the order in which each step is performed by you on that form

1st step	A............	B............	C............	D...............
2nd "	....	....	....	....
3rd "	....	....	....	....
4th "	....	....	....	....
5th "	....	....	....	....
6th "	....	....	....	....

III. What record do you make from each of the above forms?

A............ B............ C............ D...............

IV. To what book or form do you enter the above information after you have prepared it?

A............ B............ C............ D...............

V. What hour, or hours of the day are the forms under Section I collected from you?

A............ B............ C............ D...............

VI. To whom do you give the forms under I?

A............ B............ C............ D...............

VII. To whom do you give the records you copied under Section IV?

A............ B............ C............ D...............

2. List all the reports that you prepare

	Name of report or record	Days when it is ready	To whom you give it	From whom you receive your information
(a)	....	....	....	....
(b)	....	....	....	....
(c)	....	....	....	....

3. List special duties other than those mentioned above and at what hours and day you have to do them

(a)	Day of Week	Hour of Day From	To	What you do	Who gives you the work	To whom you give it when through
(a)	....	......	......	....	....	....
(b)	....	......	......	....	....	....
(c)	....	......	......	....	....	....

4. What part of your work falls mostly behind ....

Why?..

Signed........... Employee   Reviewed by............. Division Head   Edited by........   Approved......

Figure 1. Inventory of Office Job.

finished, others, for many reasons, are not.

3. When the flow of work overlaps, we may have to know the residuum of items floating within the division. These items must be so organized within the division as to enable us to know the number, the nature of items, and their age.

4. In the analysis of a division's work preceding the installation of an executive control, we must discover the number of items that represent not work unfinished because of lack of time, but incomplete work awaiting further information, additional records, or some further tracing. They usually represent some weakness throughout the organization which is passed on to the office, and the latter must delay its work in order to adjust the complications created by the people through whom and from whom these items were received. Sometimes these overhanging items represent deficient work by the division in question. Its own errors and breach of procedure are causing these little leftovers which after a time overshadow the work of the whole division.

Lack of analysis and executive control usually leads to very erroneous reasons being given for such deficiencies.

V

Let us take the concrete case of a branch of office work such as the auditing of C. O. D. purchases. Briefly reviewed the main features of the procedure in this branch are as follows:

1. The receipt of all the duplicate sales checks representing C. O. D. sales—figuring and sorting and filing them by departments.

2. The receipt of the delivery sheets on which all the sales are listed, showing the amount of each sale, whether it was delivered to the customer or returned to stock.

3. The receipt of the cashier's sheet showing how much money was received for the merchandise listed on the delivery sheets.

4. Figuring the delivery sheets to see that for the merchandise reported delivered the cashier reports the receipt of the correct amount of money.

5. Removing from the files all duplicate C. O. D. sales checks which are recorded on the delivery sheets as having been delivered and paid for, stamping the checks "paid," and also the corresponding items on the delivery sheet.

6. Sorting all the paid-in sales checks by sales clerks and departments, and listing them so that we will have all the C. O. D. sales for each clerk and for each department. Finally, adding them to secure the totals for each sales clerk and each department.

7. Most of the other checks in the files will now have to be removed by following another list of items just received, representing C. O. D. merchandise returned to stock.

Thus, every C. O. D. sale represented by a duplicate sales check can be disposed of or not as follows:

1. It may appear on the delivery sheet as having been delivered and on the cashier's sheet as having been paid for.

2. It may appear on the delivery sheet as having been returned to stock.

3. It may not be disposed of at all, for many, many reasons—mostly slip-ups and errors.

Each day's work must be finished within a day, because sales continue, and if we do not keep pace with it day by day, we shall soon have more than one day's work to do within one working day. Let us eliminate all the by-products and complications usually entering into the work of the C. O. D. division and just consider some of the obvious fundamentals.

There are six distinct major operations in the C. O. D. department:

1. Sorting
2. Figuring
3. Filing
4. Paying
5. Listing Sales
6. Adding Sales

If we are to reach the last operation at the end of the day, we must constantly watch that each operation is finished at the scheduled time of the day; and if the tendency is to slow up, we shall soon find, first, operation number 6 left for the next day; then operation 5 put off to the next day, etc.

VI

The work of the division must be constantly watched for such tendency. An executive control installed by the writer in one department store enables the chief executive to know the exact conditions in each division at 10 o'clock in the morning. This means that nothing serious can develop in a division and exist for more than an hour or two without the knowledge of the chief executive.

It is natural to expect that of the many thousands of items listed on the delivery sheets of the C. O. D. department, the clerks will skip many and fail to make any disposition of them. This is a serious defect. It may mean:

1. That the clerk picked the check from the file, stamped it "paid," but did not stamp the corresponding entry on the delivery sheet "paid."

2. That she could not find the corresponding check in the files because:

   (a) The wrong designating number was listed on the delivery sheet.

   (b) The duplicate C. O. D. check was misfiled.

   (c) She did not search carefully enough.

In any case, it means that the check will not balance and the sales clerk and department will not receive credit on their sales.

Without a daily barometer of this unavoidable evil, an accumulation of such errors and deficiencies will soon hopelessly put the division "out," and in the end the universal remedy of "writing off" and "starting clean" will be resorted to. With a daily control such a condition will never be allowed to become aggravated.

A control of this sort consists of "dummies" for all skipped items that upon further search are not properly allocated. These dummies are retained in the files until cleared in the many ways which will not be discussed here, but which will become obvious to the reader if he lists for himself all the possible errors which might be made in the process from the preparation of the sales check and delivery sheets to the time when they reach the office and pass through the several operations.

We know, however, that a sure sign of increasing inefficiency is the increase in number of these dummies. Knowing that, we should watch them daily and take immediate action if the number rises.

As stated, many of the sales checks will remain in the files without any disposition. These are usually removed from the files at the end of 10 days, and their number may be significant of the following:

1. They may represent merchandise not delivered.

2. They may be due to misfiling and will therefore at once check with the dummies.

3. They may result from errors made outside the office, but in adjusting them, however, the office must expend much time and labor.

The quantity of these old checks, how they are disposed of daily, how many of them remain open, etc., are

DAILY REPORT OF C. O. D. DIVISION

Report for......................as of 9 A M on......................

I.	Check Figuring: Sorting	Check Figuring: Figuring	Check Figuring: Filing	Pay in Section: Paid In	Pay in Section: Sales List	Pay in Section: Sales Added
Number Girls Finished.......	....	....	......	....	....	....
Time Finished.............	....	....	......	....	....	....
Date of Work...............	....	....	......	....	....	....
Total Number Depts. Finished.	....	....	......	....	....	....
Total Number Depts. Unfinished	....	....	......	....	....	....
Large Departments Unfinished.	....	....	......	....	....	....

II. Skips. Number.......... Located.......... Blue Dummies Issued..........

III. Backlist. No. Drawn.... Matched with B. Dummy.... No. checks backlisted..

Blue Dummies checked with dead files............. Total Blue Dummies canceled............. Balance Blue Dummies on hand...............

IV. Return to Stock. Day's Work........ No. Received....... No. Canceled..... Balance on hand....

V. Sales Recap. C. O. D.

Day's work............ ....

Time sent to station.... ....

Number errors detected by Recap. Clerk.................. Number Depts. not balanced by Statistics for previous day's work........

VI...............

VII...............

VIII. Journal Entry. Last date balanced......................

IX. Backlist Tracing. No. Rec'd....... No. Found....... Balance on Hand.......

Found on D. S...........By tracing..........No. B/L checks canceled.........

Paid In........Duplicated........No Record........Return to Stocks........

X...............

XI...............

(Signed)....................................
Division Head

FIGURE 2. A SECTION OF DAILY CONTROL REPORT FOR A C. O. D. DEPARTMENT.

vital points reflecting the efficiency with which the work is done outside as well as inside of the office. A large number of such discrepancies not only necessitate an increase in personnel, but delay the work of the entire department as well.

VII

A section of a daily control report for such division is presented in Figure 2. The information in this report is received every morning for immediate graphic presentation on a control board as shown in Figure 3, page 704. The tabs on the board are moved upward or downward as the case may be.

Such a control board to be a success must be built specially. Furthermore certain signals should be installed so that the executive will not have to review the complete board. A series

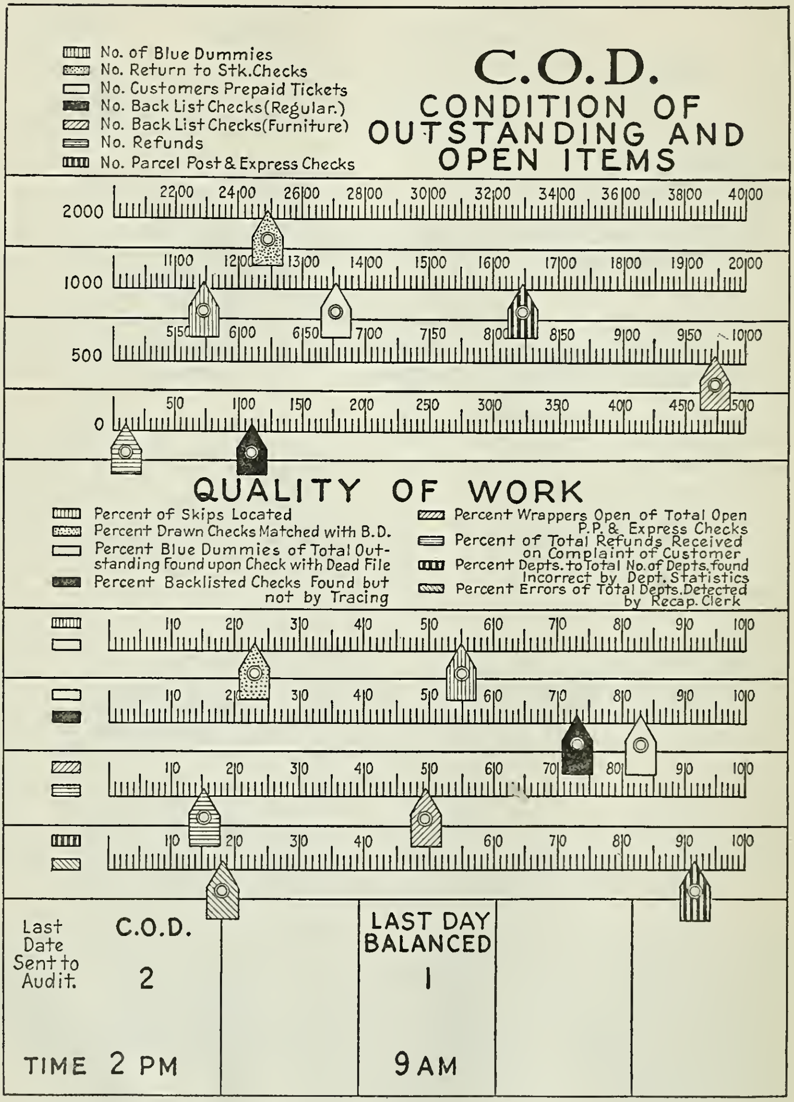

Figure 3. Graphic Control Board

of red pins over the danger tabs will call his attention to those operations requiring his immediate supervision.

While the Graphic Control Board gives an immediate picture of the day's condition, it does not show the history of each operation for a period of days or months. Take the "Dum-

C.O.D. CONTROL

Date	Days Work and Time Completed						Skips		Dummies			10 Day Checks			
	Starting	Figuring	Filing	Paying In	Sales Lt.	Adding									
	Day / Time	Day / Time	Day / Time	Day / Time	Day / Time	Day / Time	Number	Located	Issued	Closed	Balance Open	Drawn	Closed	Back Listed	

C.O.D. CONTROL

Date	Return to Stock				Backlist		P.P. and Express Open	P.P. Claims Open	P.P. and Express Over 4 Weeks Old	P.P. Wrappers Open	Analysis of Checks in File						
	Date	Received	Closed	Balance	Open	Pending					Part Return	Paid In	Return to Stock	Void	Total	Received	Balance In File

FIGURE 4. CONTINUOUS RECORD OF "DUMMIES" FOR SKIPPED ITEMS

mies," for instance. It is important to look at a column (Figure 4) representing the number of dummies open daily for the past month or two, and see whether the condition is improving or becoming worse. Such continuous record soon gives the executive an idea of what he may consider normal and what he may justly call "bad."

It is not necessary to enter into any greater details of this system of control, as the control in one particular organization cannot be taken bodily and installed in another organization. It must be built up from within the organization. Since the control must guard against weaknesses, actual or possible, it is necessary to make it to order, not to accept one "ready made," which will most likely prove to be a misfit. Such control should usually carry with it a perpetual inventory of all outstanding checks, showing the number open, number received, number closed, and the last balance.

A section of a complete control board is shown in Figure 5. If properly posted with significant signals and supplemented with a daily record of the condition of each item in all the divisions, it will give the chief executive as well as each division head a thorough and most intimate grasp of all the operations—their condition, and even their idiosyncracies.

VIII

To take another example of office procedure control, the writer once stepped into a division of an organization whose function it was to establish cost records of various manufacturing departments, which were to be charged to other departments who received the finished products. The job ticket was the basis upon which to work.

It stands to reason that if certain jobs were performed, recorded on job tickets, and then these tickets were lost, the manufacturing department would not receive proper credit for its work and in the end would show a loss in its operations. The first element to control, therefore, was the job ticket. Such control was established

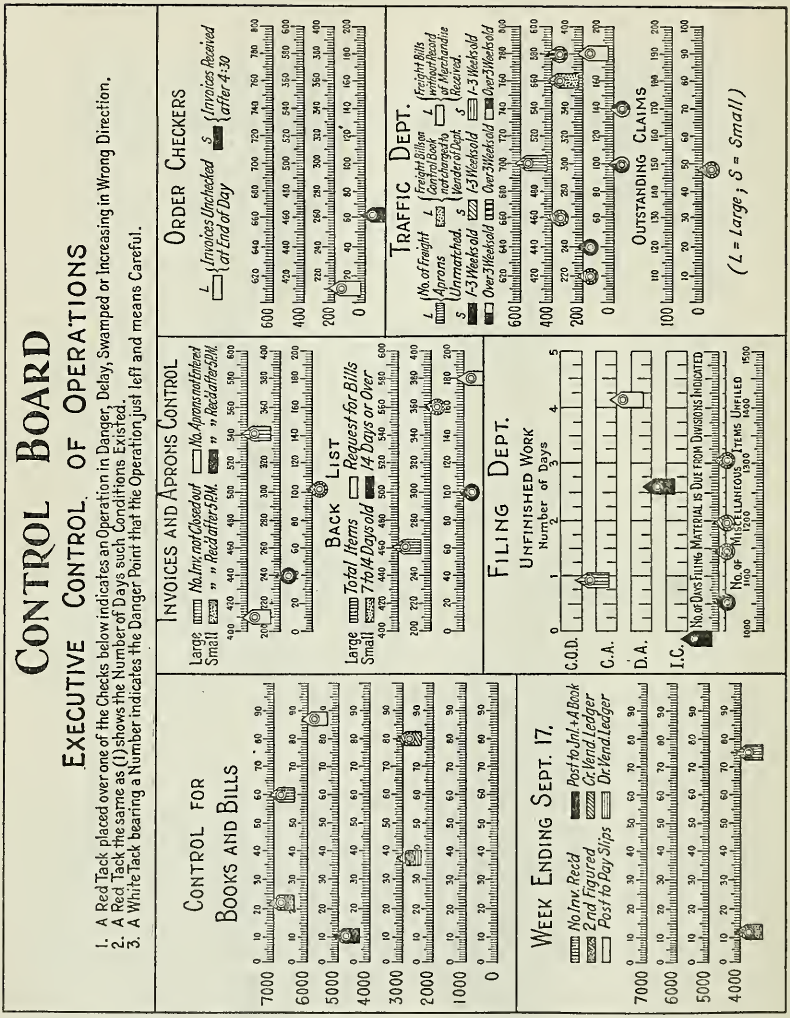

Figure 5. Section of Complete Control Board

in the division. All job tickets were numbered and as they were received in the division, they were canceled on the control cards.

What about the job tickets which were not received? It was the function of the clerk in charge of the cancellation of the job tickets to follow them up. She did. She went to the manufacturing departments where she was always assured that "it was all right." That ended her investigation.

As a matter of fact it was not "all right." But how was she to know? How was the chief executive to know unless he established some "recordo-

graph" which automatically told him whether or not this lost or skipped ticket evil was increasing. The executive daily control shown in Figure 6 solved this problem as well as all others incident to the work of such divisions.

There will always be complaints that the monthly statements do not show the true facts. How can they if the manufacturing department heads hold up the invoices so they cannot pass through the general book on time?

The control set forth in Figure 6 is so self-explanatory that no further discussion of it is necessary. A daily entry of each of the items in the summary control book similar to the daily record shown for the C. O. D. division will give a "moving-picture" of the operations of this division.

Apply this principle to every one of your office divisions and you have on your control board an immediate graphic signal and in your summary control book a continuous daily history of all the operations that go on in the office.

When this is done the executive sits at a conference with all his division heads and they talk a common language—figures, which mean the same to all of them. Instead of arguing, they have the facts before them and discuss ways and means of remedying them.

Departments

	Total	1	2	3	4	5	6	7	8	9
1. Skipped Job Ticket Numbers Number Unaccounted for...	..	..	..	..	..	..	..	..	..	..
2. Late Job Tickets Number of Hours Late as per Schedule..................	..	..	..	..	..	..	..	..	..	..
3. Number of Errors Found in Figuring										
(a) Overhead..............	..	..	..	..	..	..	..	..	..	..
(b) Straight Figuring.......	..	..	..	..	..	..	..	..	..	..
4. Number Job Tickets Received	..	..	..	..	..	..	..	..	..	..
5. Number Figured............	..	..	..	..	..	..	..	..	..	..
6. Number Invoiced..........	..	..	..	..	..	..	..	..	..	..
7. Number of Invoices Typed...	..	..	..	..	..	..	..	..	..	..
8. Number sent to Marking Dept	..	..	..	..	..	..	..	..	..	..
9. Number Returned from Marking Dept..................	..	..	..	..	..	..	..	..	..	..
10. Total Number Invoices										
(a) Open on Control Cards..	..	..	..	..	..	..	..	..	..	..
(b) Number Older than 3 days	..	..	..	..	..	..	..	..	..	..
11. Number Open Items in Mfg. Dept. Ledger not Passed Through General Books.....	..	..	..	..	..	..	..	..	..	..

Regular No. of Employees............... No. Absent............
No. Late .... No. Hired.............
No. Resigned or Discharged........*(Signed)*......(Division Head)

Figure 6. Daily Control Report of Skipped Job Tickets

CAPITAL UTILIZATION

BY J. K. MASON *

IF manufacturing activity be examined with regard to its economics, and its primary phases be isolated, those phases will be found to exist wholly within the two considerations of *production* and *expenditure.* Both these are elements within the important problem of capital turnover—the one representing the utilities created by the activity, out of which gross income is to be acquired; the other comprising the utilities absorbed which have been contributed with the hope of creating earnings. Each to be understood must be conceived as capital, or more truly, as a stage in the turnover of capital—production being capital at the *output* stage; expenditure being capital put into the creation of product, and representing the *input* stage. Production is customarily thought of in units of product, chiefly because the physical unit becomes the thing around which the selling activity revolves. Expenditure is treated as a sum of money devoted to the purchase of sundry commodities and services required for operation. Truly, however, expenditure is the seed, production the harvest; expenditure the capital absorbed, production the capital created; expenditure the *input,* production the *output;* and it is with that conception that the problems of their relationship may best be studied.

Manufacture comprises the three steps of acquisition, conversion, and sale of capital goods. Out of the sale of these goods income accrues. Income represents the value that, in the course of economic exchange, the consumer is willing to give for the utilities created. It is a value determined chiefly by the law of supply and demand; and while to a certain degree susceptible of control, it is never greatly open to executive influence.

Income returned from sales becomes the fund out of which new capital goods is acquired. It is a fund whose limits define both the ability to replenish capital expended, and the extent of earnings realized. And inasmuch as earnings can exist only when income is greater than the values of capital expended, it is apparent that the earnings figure constitutes a complete index of executive ability—both to grapple with the law of supply and demand in matters of price and distribution, and to govern the use of capital.

When income is considered insufficient, effort to increase it often takes the direction of increased prices. It is a most obvious course, and one that tends to place the burden upon the consumer. There are, however, occasions when the consumer objects, or when a competitor prevents full realization of the end desired. Another road must then be sought; cost per unit must be decreased. Five ways are open:

A. To increase both production and expenditure, but the former in greater measure than the latter

B. To keep expenditure the same and increase production

C. To increase production and decrease expenditure

D. To keep production the same and decrease expenditure

E. To decrease both production and expenditure, but the latter in greater measure than the former

The choice of method must follow the

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dictate of economic circumstance. It might be impossible to realize sufficient earnings upon investment if the last method were to be chosen; or it might be difficult to find an outlet for the added product if the first were to be used. But whatever the method, it requires, in any case, but a mathematical demonstration to show that success in it will bring about decreased unit cost —which upon analysis is but to say that the result is a higher ratio of production to expenditure, and a greater utilization of the capital values that are contributed to operation.

The accompanying illustration exhibits the five methods and their tendencies. Assuming curve X to represent the existing condition, curves A, B, C, D and E show respectively the decreasing effect upon unit cost of the methods A, B, C, D and E named in the

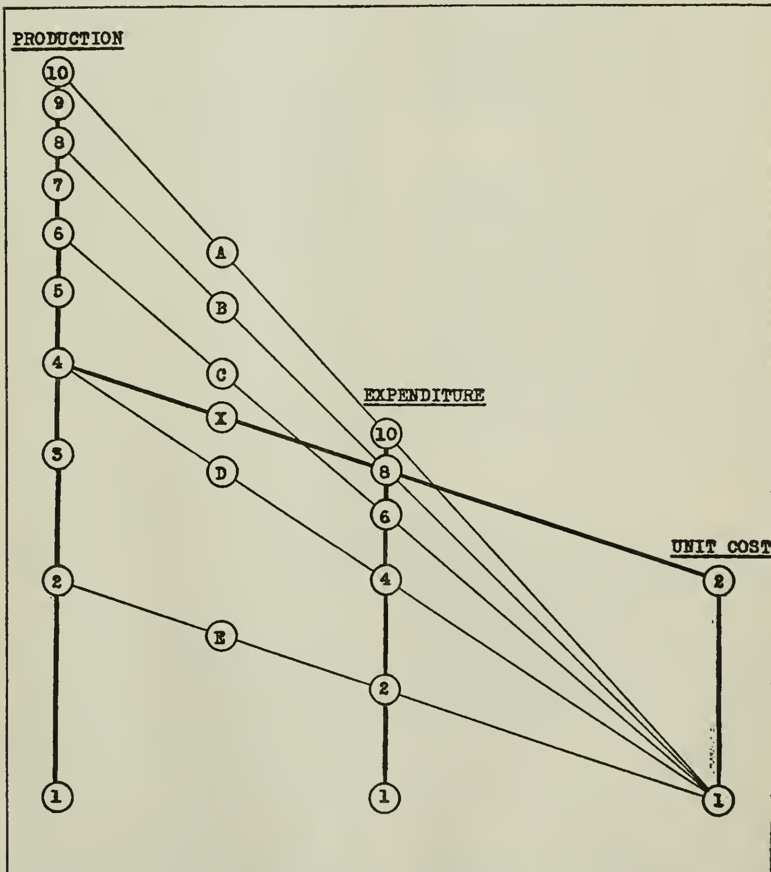

FIGURE 1. METHODS OF REDUCING UNIT COSTS

chart. There is another method, not shown in the illustration, by which earnings may at times be increased. This is to increase both production and expenditure in the same ratio, thereby leaving unit cost unchanged, as, for example, by increasing production to 5 and expenditure to 10. That method, however, while compelling the marketing of more product at a maintained price, also presupposes a 100 per cent utilization of all capital given to operation. For that reason it is excluded from the chart; the theme here being limited to a study of the possibilities of decreased cost, founded on the assumption that utilization is less than 100 per cent and can be improved.

Since it is not always possible to market more product, or even to maintain selling prices, it is but the part of wisdom that the intelligence system of an enterprise should be directed, among other things, at a continuous portrayal of the degree of success achieved in the use of capital expended. Ordinarily if that knowledge is at all attempted, it is sought by rule of thumb, or by nothing more dignified than simple guesswork. Sometimes the result is good. More often it is not.

II

The real question to be answered is —Has quantity of product fabricated and sold been as great as should have been accomplished with the expenditure involved? If not, unit cost may be decreased and capital more fully utilized. The possibilities may be exhibited by the application of a formula for what is known as *operating efficiency*.

It is to be questioned if more than a limited number grasp the full scope of the term operating efficiency. There prevails so common a tendency to think in physics rather than in economics that in discussions of the term undue weight is given to detail of shop method and to volume of output. The effect has been to befog a more vital point—the problem of proportionate economic return.

Defined, efficiency is the quotient of *output* divided by *input*. As applied to industry, however, it is commonly taken to mean the ratio that an actual output quantity bears to an established standard of quantity expected. On the average it seems to have been considered sufficiently complete to say that, for example, with a given standard of 1,000 units expected and an actual production of 500 units realized, operating efficiency stands at 50 per cent. Such notion is incomplete, for in attempting to formulate a conclusion in this manner, the only thing determined is that production achieved is 50 per cent of the standard established. The mathematical truth is that efficiency is a fact to be discovered through solution of a pure equation; which from the definition above cited, is seen to require both *input* and *output* terms. It is insufficient, therefore, to attempt to state efficiency by the use of only an output figure—even though it be stated in both actual and standard totals. The resulting quotient is but a ratio of the one to the other, and is not in the least a statement of operating efficiency as required by the economic conception.

The fault lies in a frequent failure to understand that the degree of economic efficiency attained is an index to the completeness with which capital expended has been put to economic use. What has been the *output* of utilities in form of product that has been realized from *input* of utilities in form of capital expended? Operating efficiency, capital utilization, and unit cost are interrelated; hence a solution of the equation for one will develop facts relating to the others. The equation itself may be

regarded as applying universally to manufacture, though its terms must be established individually for each industrial unit.

In stating the equation, let the following symbols be assumed:

Q = Standard production in units
E = Standard expenditure in dollars
q = Actual production in units
e = Actual expenditure in dollars
R = Ratio of actual unit cost to standard unit cost
Y = Operating efficiency
K = Capital utilized.

Standard conditions as indicated by the symbols may be regarded as those that would exist under ideal conditions, production and expenditure being such as to realize the normal capacity of the factory, and unit cost being the effect of such conditions. In any enterprise, study can develop the essential facts, namely:

Normal capacity of plant in units of product

Capital expenditure required to enable realization of that capacity

The two may be termed *standards*—the former, *standard production;* the latter, *standard expenditure.*

For comparative use, however, both must be established for a given period of time; so that in tackling the problem it is necessary first to fix the period of time involved, and then to base the other figures upon it.

It is frequently the case that character of product is so diversified that it fails to furnish a comparative unit upon which to reckon production facts. In such emergency there may be used the values in hours of the various operations needed to fabricate the product. For example:

If a, b, and c represent component parts of a certain unit of product X, and the subindexes 1, 2, and 3 represent for each part the values in hours of operations needed to make the part, then:

$$X=(a_1+a_2+a_3)+(b_1+b_2+b_3)+(c_1+c_2+c_3);$$

and the respective sums of the terms within the parentheses represent the values in hours of the component parts of X. The sum of the respective hour values for all units of product will represent the equivalent of production, and may be termed *actual* or *standard*, according as the hour values are actually consumed in making the product, or are but established as the hours that would be consumed if capacity were to be realized.

III

Knowledge of such standards, coupled with a dependable record of actual production and actual expenditure, makes possible the application of a formula developed from the symbols assumed heretofore. First, it is self-evident that *unit cost* is but the quotient of *expenditure* divided by *production.* From this may be derived the equations:

$$\text{Actual unit cost}=\frac{e}{q}\ldots\ldots\ldots\ldots[1]$$

$$\text{Standard unit cost}=\frac{E}{Q}\ldots\ldots\ldots\ldots[2]$$

It is further evident that the ratio of one quantity to another is the quotient of the first divided by the second. By using the terms of equations 1 and 2, R, the *unit cost ratio*, or the ratio of actual unit cost to standard unit cost may be stated:

$$R=\frac{\frac{e}{q}}{\frac{E}{Q}}\ldots\ldots\ldots\ldots[3]$$

For the sake of analysis let that equation be tested:

What would be the ratio of actual unit cost to standard unit cost in a plant whose standard capacity in product is 1,000 units per week, and whose standard expenditure is $10,000, if actual production is 400 units and actual expenditure $8,000? (Problem 1.)

Applying the given values to the symbols:

$$Q = 1{,}000$$
$$E = \$10{,}000$$
$$q = 400$$
$$e = \$8{,}000$$

Substituting those values in equations 1, 2, and 3:

$$\text{Actual unit cost} = \frac{\$8{,}000}{400} = \$20$$

$$\text{Standard unit cost} = \frac{\$10{,}000}{1{,}000} = \$10$$

$$R = \frac{\dfrac{\$8{,}000}{400}}{\dfrac{\$10{,}000}{\$1{,}000}} = \frac{\$20}{\$10} = 2 \quad (200 \text{ per cent})$$

From this equation for unit cost ratio it will be seen that actual conditions and standard conditions furnish respectively the terms upon which a solution depends.

IV

It has been stated heretofore that unit cost and operating efficiency are interrelated. The fact is that unit cost ratio and the degree of efficiency are reciprocals of each other. By definition:

The reciprocal of a number is the fraction obtained by dividing 1 by that number; and, conversely, the product of a number and its reciprocal is equal to 1.

In the following the equation for Y, is developed and that R and Y are reciprocals is proved.

Efficiency, being the quotient of *output* divided by *input*, it remains by comparison that economic, or operating efficiency, is the quotient of capital values created divided by capital values consumed or expended. Under ideal conditions the values of capital created would be identical in total to the values expended. Although *output* is ordinarily known in quantities of product and *input* in dollars expended, they both may be treated as capital values in terms of money. But under actual conditions the capital value of output is not always identical to that of input. Therefore a means must be established for determining the capital values of product created.

It is logical to assume that since under ideal conditions the total value of capital created is identical with that of capital expended, the capital value of any unit of product may be fixed as that which would obtain under standard conditions. If under actual conditions actual quantity created multiplied by that standard per unit did not equal the total of expenditure, that very fact would indicate that expenditure had been economically greater than should have occurred; and the overplus would be waste. For economic law does not apologize for inefficiency, and will but hold that a result that can be attained under one set of conditions determines the gauge to what should be reached under all conditions. Hence, to determine the capital value of *output*, first fix standard value per unit, and then multiply that standard by quantity of product actually created. The result may be said to represent the value of capital utilized.

An equation may be developed therefrom:

Let K = Capital utilized
N = Standard unit cost
q = Actual production in units

then: $K = N \times q$ . . . . [4]

But from equation 2, it is found that standard unit cost is equal to E divided by Q. Substituting this value in equation 4 it follows that:

$$K=\frac{E}{Q}\times q=\frac{Eq}{Q}\ldots\ldots\ldots[5]$$

By reference to the foregoing paragraphs it will be seen that *output* and *capital utilized* are synonymous. From this circumstance it is possible to equate the definition for efficiency thus:

$$Y=\frac{K}{e}\ldots\ldots\ldots\ldots\ldots\ldots[6]$$

Substituting the value of K from equation 5:

$$Y=\frac{\frac{Eq}{Q}}{e}=\frac{Eq}{Qe}$$

$$=\frac{E}{Q}\times\frac{q}{e}=\frac{\frac{E}{Q}}{\frac{e}{q}}\ldots\ldots\ldots[7]$$

V

By the definition of a reciprocal, it follows that the reciprocal of R is 1 divided by R. To prove that Y equals 1 divided by R we may proceed as follows. From equation 3 it is seen

that: $R=\frac{\frac{e}{q}}{\frac{E}{Q}}$

Then:

$$\frac{1}{R}=\frac{1}{\frac{\frac{e}{q}}{\frac{E}{Q}}}=\frac{\frac{E}{Q}}{\frac{e}{q}}\ldots\ldots\ldots\ldots[8]$$

But from equation 7: $Y=\frac{\frac{E}{Q}}{\frac{e}{q}}$

Hence, from equations 7 and 8 it is seen that: $Y=\frac{\frac{E}{Q}}{\frac{e}{q}}=\frac{1}{R}$

or, that operating efficiency and unit cost ratio are reciprocal.

To further prove that statement, let the values of problem 1 be applied to equation 7.

$$Y=\frac{\frac{E}{Q}}{\frac{e}{q}}=\frac{\frac{\$10{,}000}{1{,}000}}{\frac{\$8{,}000}{400}}=\frac{\$10}{\$20}=0.5\ (50\%)$$

By equation 3 it was shown that for the same values, $R=2$. Multiplying the above value for Y with that value for R there follows: $Y\times R=0.5\times 2=1$. By the rule for reciprocals it remains that since $Y\times R=1$, Y and R are reciprocal; or, again, that operating efficiency and unit cost ratio are reciprocal.

Now to look at still another phase of the problem, it was found in equation 6 that: $Y=\frac{K}{e}$

which may be resolved in a value for K thus:

$$K=Y\times e\ldots\ldots\ldots\ldots\ldots\ldots[9]$$

which means simply that *capital utilized* is the product of operating efficiency multiplied by actual expenditure. For the values of problem 1 this equation would result as follows: Taking the value for Y just discovered, $K=Y\times=e$ $0.5\times\$8{,}000=\$4{,}000$. In other words, the 400 units of actual production named in problem 1 should have been realized at an expenditure of \$4,000, which would have placed actual unit cost at \$10, or standard. The remaining \$4,000 of actual expenditure was, technically, economic waste.

V

The foregoing mathematical treatment may seem at first to be over-extended. The apparently obvious is, however, so often denied the honor of careful study as to become a thing eventually overlooked. For that reason it seems impossible to give too great care to a presentation so important as is the close knitted relationship of efficiency, capital utilization, and unit cost. In treating the problem, mathematics seems to offer the most direct method of bringing out the interwoven character of the three. Likewise the foregoing equations most certainly must demonstrate the effect that carelessly supervised operation will have upon earnings. Suppose that by ignorance of capacity or standards of expenditure; that by waste, inattention to duties, defective materials, excessive wages, unnecessary additions to equipment, inflated overhead; that by any of the many possible excesses or failures, expenditure were allowed to run too high or production too low; the mathematics of the equations will surely demonstrate the killing effect of such upon earnings. It behooves the executive to remember that each departure from standard condition of production or expenditure means a potential waste of capital goods.

Production and expenditure may both be viewed as the embodiments of economic utilities—the one of utilities created, the other of utilities absorbed. And happily there exists a basis for comparative valuation—the monetary system—by which both types of utilities may be known in terms of their money value. Production, therefore, as representing value in utilities created, and expenditure as indicating value of utilities absorbed, may readily be interpreted as capital utilized and capital expended, respectively. Hence the ability to state operating efficiency in terms of capital utilized divided by capital expended.

In the study surrounding a development of the standards that are necessary, there may be found conditions of detail to discourage completion of the task. The end, however, certainly is of great enough value to justify all necessary effort. So it is to be recommended that, despite the obstacles of detail or circumstance, the information should be carried to completion. For out of it must come a knowledge of the truer economic effects that are at all times developing in every enterprise, and upon which industrial success depends.

AMORTIZATION CLAIMS—REQUIREMENTS AND PREPARATION

BY KENNETH D. ROSS*

OF all the tax deductions permitted by the Revenue Acts of 1918 and 1921, probably none has caused more uncertainty and anxiety to the taxpayer who engaged in war activities than the allowance for the amortization of war facilities. It is not strange that this should be the case. The idea of charging off the costs of capital expenditures before the assets were discarded, or of writing down their values because of their excessive cost was comparatively new in accounting thought. The determination of the amounts to be charged off or written down involved the superhuman power of foretelling the economic conditions and price levels which would exist when the country had settled down after the upheaval due to war conditions. Added to all this, the laying down of rules concerning the scope of the deduction, the manner of its computation, and its distribution, which would apply fairly to each individual case, involved a nice balancing between an application of the law which would restrict unduly the benefits to be allowed and one which would open the gates wide to deserving and undeserving alike.

But all this is an old story to those who have dealt with amortization problems or have filed amortization claims. Suffice it here to say that the difficulties involved have given rise to such a number of contradictory regulations and changes in administrative policy that the taxpayer has been continually in doubt as to the ultimate disposition of his claims.

* Member of the firm of Schapiro and Schapiro, Accountants and Auditors, New York and Detroit.

Fortunately the Bureau of Internal Revenue has now arrived at what seems to be, in the main, a logical and reasonable interpretation and application of the law. Moreover its present treatment of individual claims appears altogether fair, although it may be contended that its requirements are somewhat too rigid and inflexible, and that it demands, in many cases, information which seems almost impossible to procure. It must, however, be admitted that the Bureau labors under difficulties. It has a vast number of claims to pass upon, and for the task it has available only a limited and ever-changing force of engineers and auditors. It is not surprising that it proceeds upon the theory that it is better to be sure that it has all the information it needs even though the taxpayer may, in some cases, be subjected to unnecessary trouble.

As might be expected, scant consideration is likely to be accorded claims in which an earnest and intelligent effort to meet the requirements of the Bureau has not been made. It is, therefore, extremely important that the taxpayer should inform himself concerning the present rulings of the Bureau and the nature of the information it requires, in order that he may prepare or revise his claims in an acceptable manner. If a claim is to meet the approval of the Bureau, three main sets of requirements must be fulfilled. It is proposed briefly to consider these requirements in the light of the latest regulations of the Bureau, and to attempt to show what information should be submitted.

II

The first requirement is that the taxpayer engaged in the "production of articles contributing to the prosecution of the war," or that he owned vessels used for transporting men or war supplies. There is a wide range between obvious war activities such as the manufacture of munitions and aeroplane motors and the manufacture of peace-time luxuries. The Bureau has evidently taken a fairly liberal attitude in this regard. It has recognized that the production of motor trucks was just as essential to carrying on the war as the manufacture of guns or ammunition. It has ruled that the manufacture of sugar is within the scope of the provision. Probably its most unfavorable decision has been the disallowance of the deduction to a railroad which had extended its lines to include a territory devoted to the production of munitions. Evidently the deduction is limited to those who engaged in actual production and is not to be extended to those who performed services, except furnishing transportation by water, wherein the law is specific.

Any taxpayer who, during the war period, entered into contracts to produce articles for the government, or became a subcontractor under such contracts, is entitled to the deduction. If he had no government contracts, he probably would be allowed the benefit of the deduction if he was engaged during the war in the production of articles of such character as to entitle him to priorities for materials, allotments of fuel, and clearance privileges.

Keeping these points in mind, the first step in the preparation of a claim should be a résumé of the taxpayer's activities during the war period. With this as a basis, the operations which had a bearing upon the production of such materials as were considered essential to the successful carrying on of the war should be segregated from those about which no such claim can be set forth. When this division has been made the judgment of the taxpayer should be supplemented by whatever evidence may be available. If he executed government war contracts, copies of the contracts should be at hand; if he was allowed priorities of materials, fuel allotments, or clearance privileges, copies of the orders granting them should be made.

III

After the activities of the taxpayer during the war period have been segregated in the manner described above, the next requirement is to set forth the subject matter of the claim. Under the terms of the Acts, the deduction is limited to the cost of the facilities acquired during the war period and used for war production as above defined.

In this connection it becomes necessary to define the terms "cost" and "war period." It would seem natural to assume that cost is what a taxpayer paid out for a building, a machine, a vessel, as the case might be, or what he expended in material, labor, and overhead to construct it himself. This may not, however, be cost as here used. Many of the government war contracts contained provisions making special allowances on account of the cost of plants and machinery which were acquired for carrying them out. Furthermore, settlements received on cancellation often included amounts designed to reimburse the contractor for the loss of value of these special facilities. Formerly, a taxpayer was compelled to include these amounts as income and make his amortization computation in a manner altogether independent. Lately, however, the Bureau has reversed its previous position. It now holds that the taxpayer shall consider

as cost the amounts expended for such facilities less the reimbursement received from the contracting department of the government. Since the contracting departments were in many cases more liberal in their allowances than the Bureau has been, it will be seen that this change may mean a very considerable advantage to the taxpayer.

IV

Coming now to the definition of the war period—the tax laws specifically state that it began on April 6, 1917, so there can be no question in that regard. The facilities to be subject to an amortization allowance must have been acquired on or after April 6, 1917. If construction was in progress on that date, amortization may be claimed only with respect to such part of the total cost as was incurred thereafter. The date, or dates, of the termination of the war period is nowhere laid down in the Law. Although the armistice was signed on November 11, 1918, war production was by no means immediately stopped. To the contrary, activities in certain lines went on unabated. Some government contracts were not completed until a year or two later. Probably the statement cannot be controverted that the cost of a facility acquired on or after April 6, 1917, and intended for use in carrying out a government war contract is subject to an amortization allowance, whether or not such a facility was acquired before or after November 11, 1918.

With reference to facilities acquired for production of war essentials, not the subject of a government contract, the case is not so clear. Here, at all events, it would seem that all costs incurred from the beginning of the war to November 11, 1918, and such costs incurred thereafter as resulted from commitments entered into before that date, would be subject to the allowance.

Bearing in mind these definitions, an analysis of the capital additions during the war period should be prepared. This analysis should show the date upon which the asset was acquired if purchased from an outsider, or the dates upon which construction was commenced and completed if built by the taxpayer himself. Accompanying this should be as complete a description as possible of the asset, the use which was made of it during the war period, and its cost as shown by the books. The voucher number or other reference to the expenditures should also be shown.

This analysis having been made, it should be possible to eliminate the assets which were not used in war production and also any book charges which should not have been capitalized. Additions at the beginning and at the end of the war periods should be especially scrutinized, otherwise expenditures that were made before the beginning of the war may be included among the war facilities, and invoices and other charges paid after the termination of the war period may be omitted.

After the facilities which were not used in war activities have been excluded from the analysis, the remainder should include only such expenditures as were made during the war period and used for war production. Their cost, or cost less any reimbursement received by reason of the terms of a contract or cancellation agreement with the government, is the base upon which the amortization is computed.

V

When the information outlined above has been obtained, an important requirement has been fulfilled; nevertheless the most difficult requirement still remains. Up to this point the subject

matter of the claim has been set forth. It is now necessary to show that an actual loss has been sustained, or that a real shrinkage in value has occurred in addition to mere physical depreciation.

This can be established to the satisfaction of the Bureau only by tracing the history of each war facility. In so doing, it may be found that some of the assets have already been sold; others are standing idle; while still others are in productive use, although perhaps not for the purpose for which they were originally intended, or not to their full productive capacity. Where the assets have been sold, the sale price should be noted and such references should be included that the transaction can be identified with the sales invoices. If the facilities have been scrapped, considerable difficulty may be encountered if comprehensive records have not been maintained. It may be found that the accounting department has not been notified when the assets were scrapped and for that reason the books of account do not reflect the action in any way. Where this is the case, it will be necessary to consult such other records and data as may be available, and to supplement these by the personal knowledge of those responsible for the action. Where it appears that the property has been discarded or is not in productive use, the fact should be verified by a physical examination, and it should be ascertained whether the facility is only temporarily idle or whether it will be scrapped or sold when a favorable opportunity arises. In the latter case a careful estimate should be prepared as to its realizable value.

After all the assets in each of these classes have been segregated, there should remain only such facilities as are being used productively in the business. It is not usually possible, however, to trace the history of all additions which have been made for war purposes. There will doubtless be many facilities which have disappeared and which have left very little trace. Effort should be made to reduce this residue to a minimum and affidavits should be secured from responsible officials to the effect that the property is not now in the possession of the taxpayer.

VI

With reference to the assets which are now being used in the business, a careful survey should be made and the taxpayer should make certain whether or not this use is to be continued. For example, it may be found that a building has been erected for temporary use only and will be torn down and replaced by a permanent structure within a comparatively short time. Investigation should be made with a view to finding out whether an asset is used for the productive purpose for which it is intended or whether it is merely a makeshift, the need of which could as well or better be filled by facilities of less expensive or less elaborate nature. All of these special considerations have a bearing on the case and no effort should be spared to bring to light any information which may help to bring about an advantageous settlement.

The determination of the probable post-war value (value at March 3, 1924) of facilities usable by the taxpayer in his peace-time business is subject to the difficulties present in any attempt to estimate future costs and price levels. The Bureau has appreciated these difficulties and until recently it sought the easy way out by holding that the taxpayer was not entitled to amortization on such facilities as were being utilized in production, no matter at what inflated costs they had been acquired. Now, however, it holds to the position that the taxpayer may

estimate the probable post-war cost of replacing the assets and may claim amortization on account of the excess of the actual costs over their estimated replacement costs. In order to provide a tangible basis upon which this estimate may be made, the Bureau has published an estimate of post-war costs as compared with costs at June 30, 1916. The schedule gives no information as to what costs were at June 30, 1916; neither does it attempt any fine classification or differentiation according to localities. It freely admits that the computations are purely tentative. The schedule, however, and more particularly the regulation under which it was issued, is of extreme importance to the taxpayer. It evidences a distinct change of attitude on the part of the Bureau. It shows conclusively that the Bureau has come to realize that the deduction was intended to cover a decline in price levels as well as to take care of loss in utility due to the fact that the expanded facilities could not be fully utilized for peace-time production.

To make use of the schedule, the taxpayer is compelled to separate the elements making up the cost of the property into the same groups as those used by the Bureau. For example, if he has acquired a building, it will be necessary for him to break up its cost into the labor involved, the structural steel, lumber, and other materials used.

Next it is necessary to compare these costs with the corresponding costs which obtained at June 30, 1916. To the ratios so derived, the Bureau's estimates should be applied and the resulting figures used against the costs incurred. In numerous cases this operation may prove very difficult. Not only does it require the ascertainment of the unit costs incurred, but also the establishment of the unit costs which prevailed at June 30, 1916.

VII

In order that some idea might be gained as to the probable extent of the amortization allowance arising through the use of the Bureau's estimated post-war ratios, a study was made of prices which existed about June 30, 1918 as compared with those which obtained June 30, 1916, using the same groupings as those adopted by the Bureau. On page 720 are given ratios shown by these studies and a comparison with the tentative estimates of post-war costs made by the Bureau. It must be realized that both the 1918 ratios and the Bureau's post-war estimates apply to large general groups without regard to locality or conditions. Where individual cases are considered results quite different than those indicated may be brought about. As will be seen, some of the comparisons are disappointing and indicate that the Bureau's estimates may need revision downward.

In making use of these ratios it will, of course, be realized that the estimated post-war replacement costs as obtained should be reduced by the physical depreciation sustained from acquisition to the date of the claim.

VIII

After this extensive analysis and segregation have been completed, the war facilities should be grouped in three divisions corresponding to their use status. The first group should include those which have been sold, scrapped, or have been permanently discarded, and also those which have unaccountably disappeared. The second group should embrace those for which conclusive evidence is at hand to show that they will have been removed from productive use before March 3, 1924. The third group should contain the remainder, or those which it is contemplated will be in use on March 3, 1924.

Group	Description	Ratio to 1916	
		1918	Post-war (Estimate of Bureau)
A-1	Lumber		
	(a) Hard	147	240
	(b) Soft	186	175
2	Structural steel	110	60
3	Building materials, other than lumber and structural steel	163	225
4	Steel (other than structural steel) and steel products	134	90
5	Building equipment	176	150
6	Labor (all classes)	126	160
B-7	Electrical machinery and equipment	147	130
8	Engines, turbines, compressors and similar facilities	165	175
9	Pumps	160	135
10	Boilers	188	160
11	Transmission equipment		
	(a) Shafting, pulleys, hangers, etc	160	135
	(b) Belting	128	100
12	Machine tools and small tools	147	130
13	Woodworking machinery	133	155
14	Textile machinery	250	155
15	All other machinery		
	(a) Cost not exceeding .10 per lb.	142	120
	(b) Cost exceeding .10 per lb.	160	130
16	Office furniture and equipment	164	125

Figure 1. Table of Price Ratios.

It is now an easy matter to compute the amortization applicable to each group. The costs as established should first be diminished by any depreciation which may have been sustained prior to January 1, 1918, or subsequent to the end of the war period. From the remainder should be subtracted the sales price or the estimated residual value of the respective assets as already determined. The difference represents the amortization to which the taxpayer is entitled on each asset, and the total of these differences makes up the amount of amortization claimed.

When the total amortization allowance has been established, it becomes necessary to distribute the amount over taxable periods. The allocation under the method prescribed by the bureau becomes somewhat complicated in certain cases, especially when the taxpayer has conducted his operations on a fiscal year basis; however, the regulations are quite explicit as to the manner in which the computation is to be made, and for this reason it will not be discussed here.

The important steps in the process have been described and the information expected by the Bureau has been outlined. In exceptional cases more or less may be called for. The amount of effort entailed is considerable, and the operations involved may be complicated, but it will usually be found that the results obtained are more than commensurate with the endeavors; in fact in most cases their measure will be the difference between a fair allowance for amortization and a probable total disallowance.

COST OR MARKET IN PRICING INVENTORIES

BY FRANK LOWSON *

IN the September issue of *Administration* appear two letters[1] on the Valuation of Inventories under Regulations 62 issued under the 1921 Revenue Act. The point involved is so important that your readers should not be left in doubt about it.

The Commissioner of Internal Revenue has finally ruled that, "Where an inventory of goods at the close of a taxable year includes merchandise which was on hand at the beginning of the year, the cost thereof to be compared with market in applying the basis of cost or market whichever is lower, should be the price at which such goods were included in the opening inventory."[2]

The following contribution to the discussion was sent to the Commissioner on September 7, 1922, and is now offered to your readers in order to aid them in deciding which is the more sensible view.

II

In my article entitled "Treasury Regulations Relating to Inventories" appearing in the March 1922 issue of *Administration* there appears the following statement:

> Article 1584 needs clarification and amplification by the Bureau of Internal Revenue. It is a prolific source of uncertainty to the average taxpayer.

Judging from the two letters in the September issue, it would appear that the necessity for clarification of the inventory regulations applies not only to Article 1584, but also to Article 1583. If Mr. Haugh's views, as expressed in his letter in the September issue correctly represent the Department's present interpretation of Article 1583, it is time for the Department to reconsider their position and to change it to correspond with the views expressed in Mr. Munn's letter, which also appeared in the September number of *Administration*.

In the March article the following statements also are made:

> Article 1582 in effect says to the taxpayer: You are permitted to value your inventory on the principle of cost or market, whichever is lower. That means: Value each item at cost in one column (column 1), at market in another column (column 2) and extend the lower of these two figures on each item into a third column (column 3). The total of column 3 is the value of the inventory on the basis of cost or market whichever is lower. It is permissible to group different sizes of the same kind or class of article, and price by groups.
>
> Article 1583 defines the methods by which the cost of each item may be determined: i.e., it states how to arrive at the valuation to be entered in column 1.
>
> Article 1584 defines the methods by which the "market" valuation of each item or group is to be determined; i.e., it states how to arrive at the valuation to be entered in column 2.
>
> Before going into the details of Article 1584, which contains the crux of the whole situation, we desire to draw attention to the general purpose of the three principal articles above referred to. Briefly stated, it is as follows:
>
> 1. Article 1582. To give the taxpayer the choice of cost or of market, whichever is lower, on each item or group of items.

* Member of the firm of Patterson, Teele and Dennis.

[1] Pages 379–381.

[2] See letter dated November 4, 1922, from the Commissioner appearing at the end of this article.

2. Article 1583. To define how to figure cost.
3. Article 1584. To define how to figure market.

Like Mr. Haugh's article to which Mr. Munn's letter refers, the March article was written before Regulations 62 were issued. However, Article 1582 of Regulations 62 continues to have the same general purpose as Article 1582 of Regulations 45. The 62 Regulation in addition to restating most of the contents of the 45 Regulation enters into further details on the methods of pricing inventories. Article 1583 in both sets of regulations gives instructions on how to figure cost prices. Article 1584, in both sets of regulations, gives instructions on how to figure market prices.

Article 1582 of Regulations 45 states that whichever basis is adopted (that is either Basis A, cost alone, or Basis B, cost or market whichever is lower) must be applied to each item and not merely to the total of the inventory. While some of these words have been omitted in Regulations 62, the principle applies to the 62 Regulation just as it did in the 45 Regulation.

A taxpayer, therefore, taking inventory on Basis B, cost or market whichever is lower, in preparing the cost column must follow the instructions of Article 1583 which states that:

> 1. In the case of merchandise on hand at the beginning of the taxable year, the cost means the inventory price of such goods (i.e., the inventory price at the beginning of the year)

and after having completed the second column of its inventory by pricing that column at the market price at the end of the year, the taxpayer has no option but to extend into the third column the lower of the two figures, which if the cost column is the lower will be the inventory figure as it appeared on the inventory at the beginning of the year.

Mr. Haugh quotes from a recent letter of the Income Tax Unit the following words:

> Relative to the first paragraph of Article 1583, Regulations No. 62, you are advised that this paragraph has reference to an inventory valued on the basis of cost and not on the basis of Cost or Market whichever is lower.

Whoever wrote such an instruction over the signature of the Commissioner of Internal Revenue wrote a proposition which is directly opposed to the objects for which the rule "Cost or market whichever is lower" was adopted and the instruction is based upon an erroneous idea of the proper scope of Article 1583. It has apparently been assumed by the writer of that letter that the title of Article 1583, "Inventories at Cost," limits the application of the contents of the article to inventories at cost *alone.* If that assumption is correct, then the title of Article 1584, "Inventories at Market," must also be held to limit its application solely to inventories taken at market *alone.* But there is no such permissible basis as *market alone* specifically provided in the Regulations. The only condition under which *market alone* may become a permissible basis for taking an inventory is when, under Basis B, cost or market whichever is lower, the market happens to be the lower on every item on the inventory, and in practice this condition will not be found once in a thousand inventories.

Under these conditions it can be said that there is no such thing specifically provided for in the regulations as an inventory at *market alone.* That being the case, it is ridiculous to say that the title of Article 1584, "Inventories at Market," limits its application solely to inventories taken at *market alone.* On the contrary, if the title, "Inventories

at Market," permits the application of the details of that article to the market column of an inventory taken on Basis B, cost or market whichever is lower, it certainly is foolish to say that the title of Article 1583, "Inventories at Cost," does not permit the application of the details of that article to the cost column of an inventory on Basis B, cost or market whichever is lower.

If both of the above assumptions were correct the taxpayer would be left entirely without instructions as to how to figure either cost, or market, for the purpose of completing an inventory on Basis B, cost or market whichever is lower. The assumption that the application of either Article 1583 or Article 1584 is limited in such manner is therefore ridiculous.

III

If the titles of the Articles 1583, "Inventories at Cost," and 1584, "Inventories at Market," were omitted, would there be any doubt that Article 1583 would apply to the pricing of the cost column of an inventory taken on the basis of cost or market whichever is lower, or would there be any doubt that Article 1584 would apply to the market column of such an inventory?

Article 1583, after the title words, "Inventory at Cost," reads: "Cost means * * *." Now, if the word "cost" is the thing that is being defined, surely the word "cost" has the same meaning in the two expressions: (1) inventories at cost and (2) inventories at cost or market whichever is lower. How any sensible human being could argue that the word "cost" in the first of these expressions means one thing and in the second of these expressions means something different is beyond comprehension.

As previously stated, the scope of Article 1584, therefore, is to define how to figure market prices. It is not a set of instructions for the taking of an inventory at market alone. On the same reasoning the scope of Article 1583, therefore, is to define how to figure cost prices. It is not a set of instructions for the taking of an inventory at cost alone, and unquestionably Article 1583 in its entirety should be made applicable to the figuring of the cost column of inventories taken on Basis B, cost or market whichever of the two may be the lower.

IV

The principal object of the rule, *cost or market whichever is lower*, is to permit taxpayers to price their inventories upon the lowest possible reasonable basis. Another object is to avoid taxing the taxpayer on paper profits on fluctuating prices of goods unsold.

The Income Tax laws and the decisions made thereunder have adopted the principle that unrealized appreciation of value will not be included as income for tax purposes. It will be contrary to the letter and the spirit of that rule to force the taxpayer to include in any year an unrealized appreciation of value on any item which stood in his inventory at the beginning of that year. I believe that it is not the intention of the Department to do this for the reason that it would be equivalent to a breach of their general rule and because the price of the article in the following year might again fall to the lowest point on which it stood on the original inventory taken two years before. In these days of fluctuating values all over the world and in view of the anticipated reduction in the level of prices which is expected to take place before the pre-war prices can again be reached, it would be most unjust to compel a taxpayer to increase the value of any item on his inventory

at the end of any year to a figure in excess of that at which it was included in his inventory at the beginning of that year.

In the application of the rule, cost or market whichever is lower, which has been in existence for many years before the present income tax laws in the United States, I understand that it was the general practice of most accountants, in figuring the inventory at the end of the year on any items which were on hand at the beginning of the year, to price the cost column of the later inventory at the figure at which the item had been included in the inventory at the beginning of the year whether or not that figure was original cost.

V

The foregoing statement was submitted to the Commissioner of Internal Revenue and after some correspondence the Commissioner's final ruling was set forth in the following letter which was received by the writer's firm in the early part of November, 1922:

Sirs:

Reference is made to office letter dated October 12, 1922, in reply to your inquiry of September 25, 1922, in regard to the interpretation of the first paragraph of Article 1583 of Regulations 62 as applied to the valuation of an inventory on the basis of cost or market whichever is lower.

The paragraph in question states that cost means "in the case of merchandise on hand at the beginning of the taxable year, the inventory price of such goods." Upon further consideration of the question presented by you, it is the opinion of this office that cost, for the purpose of valuing an inventory, is to be determined in accordance with Article 1583, regardless of whether the basis of cost, or cost or market value whichever is lower, is used. Therefore, where an inventory of goods at the close of a taxable year includes merchandise which was on hand at the beginning of the year, the cost thereof, to be compared with market in applying the basis of cost or market whichever is lower, should be the price at which such goods were included in the opening inventory.

The ruling given in the letter of October 12, 1922, is hereby revoked.

Respectfully,
D. H. Blair
Commissioner

A MESSAGE TO THE MAILING DEPARTMENT

BY H. A. BLACKMAN *

IV– CO-OPERATION WITH THE POST-OFFICE

THE advocates of one-cent letter postage may form societies and hold conventions and pass resolutions until they get tired, but that will not do it. There is only one way to gain this one-cent letter rate and that is by such intelligent co-operation of the business world with the post-office department that millions of hours of unnecessary labor will be eliminated and Congress can afford to reduce the price. A little care, intelligence, and forethought in every business office would cut down the cost of mail service to an amazing degree and reduce night work with all its terrors to a minimum. Co-operation is the battle cry of every forward-looking business man today and the United States Mail service is the biggest business in the world. Any effort made to co-operate with that big business will pay enormous return for the effort made.

Do not permit the simplicity of this matter of co-operation to deceive you into thinking it trivial. Few outside the service will be impressed with the importance of the matters treated of in this article, yet one of the smallest effects of their general adoption by the business world would be *one-cent letter postage*. That is not trivial. Prompt, sure, swift, dependable service is not trivial and, the simple little things talked about in this article are the essence of that co-operation.

Thousands of business men think that anybody can prepare mail for the post-office. Very often, this work of preparation is turned over to a happy-go-lucky office boy who prepares it with just one idea in mind—to get through and get home. The result is a heedless rush which causes a hundred costly blunders.

One of these, the making of "stickers," i.e., letters stuck together, was mentioned in the article on first-class mail.[1] These pesky stickers not only missend important letters but they cause the canceling machine to ruin and damage a great many more. But, in spite of these crimes of the "sticker," its greatest sin is its lack of co-operation—its interference with the service. A big bunch of letters stuck together by sloppy mail preparation means a long tedious job, for they must be pulled apart at the post-office and, in every rush, such letters will be laid back until there is plenty of time to do this extra useless work. Business men do not particularly relish having their mail "laid back," yet that is the price they must pay for this and other similar instances of poor co-operation.

II

The biggest and most important idea that I or any other postal worker can offer the business man is that of inspection of mail before it goes to the post-office. After the letters are stamped and sealed, some reliable person should sit down quietly and, without rush, should run through the

* President, Indiana State Branch, United National Association of Post-Office Clerks.

[1] See *Administration* for September, page 324.

mail to catch these failures or imperfections:

1. Failure to stamp
2. Failure to seal
3. Imperfect address
4. Stickers
5. Short postage
6. Improper separation of important mail

If mail is allowed to pile up all day long and is prepared only in the evening, no one will want to stay until the sealing and stamping is finished, and that will make it difficult to find a mail inspector. But, if the mail is sent to the post-office ten or twelve times a day, the inspector can take care of it a little at a time and the evening job, when everyone is rushing to get home, will be light. This plan not only gains competent inspection but gains the advantage of several mailings during the day which not only save time but avoid the evening avalanche. If your system does not harmonize with this inspection idea, it will bring you big returns to change the system so that it will.

III

The following list of simple directions if followed will give the postal authorities a maximum of co-operation and will gain for you the cream of the postal service:

1. Face letters nicely *after dry*—no stickers
2. "City"—local—mail all to itself
3. All classes of mail kept separate
4. When convenient, towns and states kept separate
5. Stamps in upper right-hand corner
6. All mail inspected for points above mentioned

These things seem absurdly simple, but they are the very essence of co-operation. The adoption of them by every business firm in the land would certainly bring one-cent postage, and the adoption of them by *any* business firm would bring that firm the very best that the service has to give. A few shrewd business men are already getting such service by following these rules and every other business man can get that same service by doing the same thing. I have given you the secret and it's up to you.

Another little giant of importance is the matter of "Postage Due." There is no reasonable explanation of the resentment caused by the receipt of a postage due letter. The man who has to pay that short postage will raise more fuss about it than about the loss of a thousand dollars in a business deal. It's a strange fact but it is true. I have seen it too many times to be mistaken. The person who pays postage due feels that the other fellow has taken an unfair advantage of him, and it makes him "sore" to be beaten in that way.

The only way to remedy this matter is properly to impress the office boy with the importance of putting on the right postage. Provide him with beam postal scales—no spring scales—and give him strict orders to weigh and properly stamp all heavy letters. Warn him against guessing because no one can guess letter weights with certainty. Short postage will certainly lose business and good-will for any one who permits it—knowingly or otherwise.

There is still another angle to this postage due peril. The rating and collecting of postage due is not only an enormous expense to the Department, but it is a constant source of trouble to the service. An order was issued February 1, 1921, against the careless or intentional mailing of letters "postage due." If a firm practices this evil, a warning will be

given. If warning fails, the firm will be reported to the Third Assistant Postmaster General whose methods are not always gentle, and the amount of annoyance and expense caused by such a report would better be imagined than experienced.

IV

In the presentation of mail that has been properly prepared, the guidance of local post-office officials should be asked. Let them know that you are anxious to co-operate by presenting it properly and they will gladly tell you how. Thousands of concerns do not know this. They send their mail to the post-office with just one idea in mind—to get it there any old way. Often, an office boy will go to the post-office and stand at the letter drop with 500 letters, all nicely faced, and will patiently put them, a few at a time, through the little drop slot, thus destroying the facing and making useless labor in both his own office and the post-office when the merest inquiry would have told him where to hand the whole bunch over and have it properly disposed of in a moment's time.

Another matter for inquiry is the proper presentation of registered, special delivery, and "high power" letters. This stuff should not be dropped with the ordinary mail. The local officials will tell you exactly how to present each of these items so that you may get the very limit of service, and it costs nothing but the asking.

This is especially true of registered mail. The regulations require that all registered matter must be presented to regular employees for receipt. If you drop your registers into the ordinary mail, you will receive a printed slip warning you against the practice. If warnings fail, your letters will go as ordinary mail and report be made to the Third Assistant. His attentions will stop the practice immediately.

Another danger point of presentation is the miscalculation of mailing time. Smith knows that a train leaves his city for Chicago at 7:20 P. M. He waits until 6:30 to start and reaches the post-office at 6:40. He thinks "I have 40 minutes until train time—lots of time" and drops his important letter into the ordinary drop with a thousand others. The whole bunch of letters from this drop is carried to the facing table and it takes time to face them. It takes more time to run them through the canceling machine. It takes still more time to work those letters, one at a time, into a mailing case for dispatch. It takes time to tie up the mail for the 7:20 train. It takes time to load and transport the mail to the station and put it on trucks there for loading into the mail car. All these time killers make Smith's 40 minutes look like three seconds. It is very doubtful indeed if his letter catches his train but if he had presented it at a window and asked how he could get it right into the mail he would have been *sure* of the service he desired.

Every post-office also has its "last minute" nuisances in the registry department. Thousands of business men do not know that their office employees are studying this registry closing time and making this "last minute" presentation. If the postal clerk who receipts for these tardy letters had to prepare them for dispatch that evening, he would have to stay and work an hour overtime. As a matter of fact he only receipts for them and lays them away in the vault for the morning force to prepare for dispatch. This makes an unreasonable delay of important mail which earlier mailing would have avoided.

Another case where ignorance causes a lot of useless work is that of the office boy or girl who drops a lot of circulars into a collection box or the first-class letter box at the post-office. Third-class and first-class are not permitted to be worked together and this mixing of them in the drop box causes a long, tedious job of separation before either can be worked. Time after time I have seen this "stunt" delay special delivery letters and other important mail just because that office boy or girl did not know or understand the seriousness of the blunder.

V

The greatest single item to be remembered in the presentation of mail is, however, the point of "early mailing." You have heard of that before in these articles. You have been hearing of it for the past year—from the Department. It is very natural and human to let the mail pile up all day long and take it to the post-office at the close of the day's work. The business world has very naturally drifted into this rut and they follow the rut because it would require an effort to change their system for the earlier mailing. The "herd" of business men will always take that attitude toward their mail but, here and there, we find a few live wires who are shrewd enough to grasp the best the service offers by early mailing while the "herd" takes the dregs. It is for you to decide whether you want to belong to this herd or to be among the "go-getters."

The best way to give early mailing co-operation is to keep up the sealing, stamping, and inspection all day long. After inspection, the first person going toward the post-office can take all the mail that is ready. Thus, eight or ten mailings can be made each day and the evening avalanche avoided. If this plan does not suit your system, then your system is wrong. *Change it!*

The Department has made it plain just what advantage you can gain by early mailing. The earlier dispatch may gain a full day upon the delivery of your mail. The avoidance of the evening rush means an avoidance of error and damage worth a great deal. This better, quicker, surer service is all gained by the simple process of several mailings each day, leaving nothing but the less important mail for the evening rush. That rush will always be there and, if errors are made by postal workers, right there is where they will be made. The average dispatcher strikes about 50 per cent of his mail in the evening rush and he makes 90 per cent of his errors there. This isn't guesswork because I have been doing just that thing for 20 years.

The Post-Office Department has shown you the many ways in which early mailing can benefit you. They have proved to you that it will save you good, hard money—that it means the cream of the service to you. If you stay in the old rut, you get nothing but the leavings. Here is surely a place where laziness does not pay.

VI

One tremendously important point in which business men can co-operate with the Department is in the study of the official "Postal Guide" and its supplements. Every business man should subscribe for these books each year and then he should turn them over to his office force for reference and see that the office force does refer to them. These books can be had for a song and it is a mighty small business which cannot save hundreds of dollars each year by using their information.

Another important matter in co-operating with the Post-Office Department is to have your mail workers visit the post-office and learn as much as possible about the processes of mail handling. Just for example, let us take the "red hand" letter and see how postal workers handle it. To the service, this red hand on a letter means just one thing—*return to writer*. You can write a new address on that letter and start it out a hundred times and it will come right back to you every time. But, if you scratch out your own return address and put the address to which you wish the letter to go in place of the return, the letter will go right where you want it to go. A thousand little things like that can be learned by observation at the post-office and there is usually no other way of finding them out.

If you have any honest desire to co-operate with the service, for goodness' sake do not make any special request about the delivery of your mail. To illustrate: Jones wants his *Administration* and his *Wall Street Journal* delivered at his office. He wants his letters in his lock box at the post-office and the family mail and magazines at the house. That is very simple if Jones was the only one who made such a request but there are several thousand other people in the city and each of them could think up something like that if he would. City distributors everywhere are loaded down with that useless stuff. No one outside the service realizes what a mass of such information they have to remember and most of it is utterly unnecessary. If Jones wants his business magazines sent to his office, they should be addressed to his office. The same thing is true of the rest of his mail. He can have it all sent to him under proper address and a special request will be unnecessary.

Distributors have too many necessary requests to bother with anything that can be avoided. When a firm wants its special deliveries sent to the plant until 5:00 P. M. and to the manager's home after that time, that is a reasonable and necessary special request. If Brown and Jones dissolve partnership and Brown gets the mail, clerks positively must remember that. A thousand things of this kind must be carried in every city distributor's mind. But the necessary requests are a heavy burden. Do not add to this burden if it can be avoided.

One point which is bringing loss and disappointment every day is the tendency of business men to delay the mailing of a letter until it requires *perfect* service to get it to its destination in time and save them from loss. Do not expect *perfection*. The men of the service are merely human beings. It is true that they are trained to the highest pitch to avoid errors, but they make them, and they will continue to make them as long as they are mere men. Besides, there are several thousand old box cars that may break down at any moment and delay the flying mail. And other accidents may happen. Give your mail all the time you can to overcome the possible handicap of wreck and error and your risk will be greatly lessened.

VII

In concluding this message to the mailing department let me give my testimony to the efficiency and the will to serve of the postal service. It deserves your support and your co-operation. Postal workers make errors and trains fail to make their schedules but in almost 999 cases in a thousand they make good. Any unreasonable blame of the service should be taken with a large pinch of salt.

Time after time it has been proved that unprincipled persons have blamed the service for their own delinquency in order to avoid the penalty of that delinquency. When anyone tells you that the service is to blame, make them prove it.

I do not mean by this that there are no justifiable cases of blame against the service. There are, and your postmaster can run them down for you. Simply make your statement to him and he will start a tracer that will run down the blame for the costly delay that you have suffered. I warn you, however, that about 85 per cent of such investigations will place the blame upon the mailer or upon your own office—that is about the proportion that obtains in such cases. The Department *never* evades its responsibility for its service and postal workers never make any pretense of perfection, yet you should have faith in them because they are bending every human effort to approach perfection.

And, finally, at the risk of wearying you, I want to emphasize again the matter of inspection of mail before it goes to the office. Carelessness and absent-mindedness are the source of an enormous amount of postal trouble. Your workers do not mean to make mistakes but something distracts their minds and they make them. Inspection will detect all such errors and save the loss that would otherwise ensue. The half-made address, the unstamped letter, the sticker, the unsealed letter—all these are the product of carelessness and the sum total of their yearly cost would amaze you. Therefore, my first and last advice is *inspection*. It is the biggest and most important co-operation you can give the postal authorities and I am asking you to adopt it as your first move for postal improvement.

AVOIDANCE OF LITIGATION

BY R. CORNELIUS RABY*

NOT all litigation can be avoided. Even if the element of animosity were entirely absent, there would still be a certain amount of friendly litigation for the adjudication of rights which were undetermined by reason of doubtful or conflicting evidence, or not clearly defined by law.

The writer once heard a lecturer on law declare, with great impressiveness: "The law provides for all eventualities." As a matter of fact, the law does nothing of the kind. If it did, there would be considerably less resort to the courts. Complications and controversies in business are constantly arising which are new in business experience, and which must be submitted to the courts because they are not already the subject of common or statutory law or judicial precedent. Even statutory law is sometimes incomplete, ambiguous, or self-contradictory, so that the aid of the courts must be invoked for the application or construction of the law. Again, the decisions of the courts in their interpretation of the law are frequently found to be in conflict, which leaves the lawyer as well as the layman in doubt as to what the law may be on a given point, and necessitates, or at least encourages, a fresh appeal to the courts.

The fact remains, notwithstanding, that the courts are burdened with a great deal of litigation which is altogether unnecessary or which might have been avoided had the litigants been advised in time of their respective rights and liabilities.

Lawyers profit largely by the mistakes of their clients. If business men paid as much for insurance against litigation, in the form of legal advice and direction, as they pay for insurance against fire and other losses commonly covered by insurance, their losses and expenses of litigation would be reduced in like proportion. Most business men think of a lawyer as one to be consulted only in time of trouble, just as most of them never go near a doctor except when they are sick. If every important business transaction were first submitted to the scrutiny of a lawyer, many mistakes would thereby be avoided.

Why is this not done? No man would attempt to conduct a large business without the assistance of a trained accountant or bookkeeper to supervise his accounts. The bookkeeper is recognized as a necessary cog in the machine, and in a well-regulated business he serves in a more or less advisory capacity. The proper conduct of business from a legal standpoint is surely at least as important as a correct accounting system; yet comparatively few business men appreciate the importance of having professional advice on the legal aspects of the everyday problems of their business.

II

The business man, of course, cannot call in a lawyer every time a question arises as to the wisdom of this or that course of action. That would be too cumbersome and expensive a procedure. The way lies open for him, however, to have the benefit of legal advice constantly at hand and at a very moderate cost.

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There are thousands of lawyers in the large cities who work for other lawyers on a salary basis and who have very little, if any, practice of their own. These men sometimes know a good deal more law than the lawyers for whom they are working, but the average salary which they receive is very low, considering their attainments, simply because the supply exceeds the demand. Lawyers with years of experience are offering their services by advertisement today at $50 a week or less, sometimes at figures which a bookkeeper or a stenographer, to say nothing of a carpenter or a bricklayer, would scorn to accept. Almost any such lawyer would welcome an opportunity to identify himself with a substantial business in an executive and advisory capacity at a moderate initial salary, particularly if it were coupled with the prospect of regular advancement as his services became more valuable by experience.

Some business men may feel that their legal matters are too important to be entrusted to any but the best talent available. Well, even the best is not infallible, and a hundred-dollar opinion may be just as good as a thousand-dollar one. Not only that, but it must be remembered that the top-notchers in the legal profession cannot possibly give their personal attention, except in a limited sense, to all the matters which are submitted to them. One does not often hear of a lawyer refusing a retainer for the reason that he already has as much business as he can handle. Should he find himself so situated he will hire as many assistants as he may need to take care of the business that comes his way. The result is that many of his clients are paying handsomely for the use of his reputation without getting the use of his brain. Much of the work for which he receives payment and credit is done by some subordinate who would probably do it more honestly and thoroughly if he were employed directly by the client instead of indirectly through the lawyer.

In a recent New York case, for instance, heavy damages were recovered against a lawyer of eminent standing at the bar for failing to ascertain for his client, when he should have done so, the statutory requirements relating to chattel mortgages in a neighboring state. In consequence of his negligence, a chattel mortgage which the lawyer drew for his client, and upon which the latter had relied as security for an obligation running into thousands of dollars, was found to be invalid, with resulting loss to the mortgagee. The lawyer himself was only indirectly to blame, for he had delegated entire charge of the transaction to one of his assistants.

In pursuance of the plan suggested, every business organization of size and character to justify, should, instead of hiring a lawyer at intervals to help it out of trouble, employ an attorney permanently on its executive staff, acquaint him thoroughly with all details of its business, so that he would know more about it than any outside lawyer, and then pay him well to keep his employer within the law and out of the courts so far as possible. With the special knowledge thus acquired he would be infinitely better equipped to render legal advice pertaining to that business than any practicing lawyer who had not specialized in that direction. If he possessed any aptitude for trial work, he could also, where litigation proved inevitable, try his case with greater confidence and better results than an outside attorney, because he would know his case more thoroughly. He would be a better master of his facts and evidence, and in case of a trial by jury, he could pick his jurors with finer discrimination

and address them with greater effect.

Among the matters which would properly be entrusted to the supervision of such a permanent member of the staff are taxes, insurance, corporate minutes and reports, collections, claims, contracts, real estate transactions, etc. Whether or not he should also conduct the trial of a case in the event of litigation, would depend upon various considerations, chief of which would be the other demands upon his time, and his qualities as a trial lawyer. Not every wise counselor makes a successful pleader.

III

Every one is presumed to know the law, but how many people do know it, even that part of it which is important for them to know? The legislature of New York, at its regular session of 1922, passed 672 bills which became law. Of these, 43 are appropriations and many others are purely local in their application. The majority of them, however, relate to matters which directly concern the people of the state at large, either as individuals, as employers of labor, or as agents of corporations. The laws which are made known to the public through the newspapers are a very small percentage of the whole. Here is another opportunity for the salaried attorney to render valuable assistance to his employer. By means of one or another of the legislative reporting services which are always available, he can keep posted on new laws and amendments to old ones; he can give warning of proposed legislation which may be hurtful to his employer's interests; and he can, if desired, appear for his employer before the committee to which an objectionable bill is referred, or at a hearing appointed by the governor, to argue against its passage.

He should be familiar, not only with the laws, but also with judicial decisions affecting his employer's business. To know the law thoroughly is to know its latest interpretation by the appellate courts. The reported decisions of the highest courts in every state of the Union can be studied from week to week in any well-equipped law library, or they may be procured by subscription at a reasonable cost. It sometimes happens that the scope and effect of a statute is materially modified by court decisions.

A business law usually partakes both of an enabling and a restraining character. It affects primarily two groups of persons with closely related, and in some respects conflicting, interests. When it comes to applying the law in a doubtful case, it is only natural that each group should read it in the light most favorable to its own cause. Failing to arrive at an agreement or to effect a compromise, they take their quarrel into court. Sometimes the very point at issue has been decided before, perhaps in another state. For this reason it is important to watch the decisions in all the states.

There is today a distinct trend toward uniformity in legislation on certain subjects in the various states, and this fact lends added value to the decisions of foreign jurisdictions. One striking example of this is the workmen's compensation law, which has been enacted in one form or another in all but five states of the Union. Some of these laws follow a uniform model, and those which are different in form are either identical or closely alike in principle and effect. There is perhaps no single form of statute which has provoked more extensive litigation than the workmen's compensation law. It is highly important, therefore, for every large employer of labor affected by such a law, to know what questions arising

under the law have come before the courts, and how the courts have answered them. All this would be within the purvey of the salaried attorney.

IV

Here is one New York corporation's experience with the plan of having an attorney on its pay-roll: In the latter part of 1916 it established a legal department in charge of an attorney whom it employed for this purpose. This man had had a limited and not very lucrative practice, and while his record was good and his credentials satisfactory, he was not widely known, either in his profession or outside of it. He was first given an opportunity to acquaint himself with all phases of the company's business, and then given free rein to revise its procedure wherever he could show a good reason for it.

This corporation had formerly referred all of its legal matters to a firm of high-priced attorneys on an annual retainer, the amount of which varied according to the nature and extent of their services. During the three-year period 1914 to 1916, its losses in the adjustment of claims had amounted to $8044, or an average yearly loss of $2681. For the ensuing three-year period 1917 to 1919, its losses in the adjustment of claims aggregated $2412 or an average yearly loss of $804. The number of suits commenced against the company during the earlier period was 45, or a yearly average of 15, while the next three-years' total was only 20, or a yearly average of about seven. The average salary paid to this attorney was less than the annual retainer which had previously been paid to the outside attorneys; and in addition to the double saving which had thus been effected, the attorney had lent material assistance in other administrative channels of the business.

The place of a salaried attorney is by no means a new one, as the leading railroad and industrial corporations for many years have maintained legal departments as part of their executive offices; but the feasibility and advantages of the plan for business of smaller proportions are not as widely recognized as they deserve to be.

THE FINANCIAL SITUATION

BY H. PARKER WILLIS *

BUSINESS conditions during the month of November have practically crystallized along lines which during preceding weeks had already become tolerably apparent. It is now plain that, for the present, the volume of business is near the peak or maximum of what can be achieved under existing conditions. The level of securities prices, generally speaking, cannot safely go much higher than now without forecasting a business development or improvement which is not yet in sight. There remains the question of financial inflation which, if fully invoked, might be used as the basis for price increase, and might be employed to establish a condition of artificial prosperity. At present, however, nothing of the sort is visible, and it is certainly to be hoped that nothing of the sort will be.

II

Level of Securities Prices. This view of the case explains the general movement of securities prices during the month. That movement has been toward decidedly lower levels, although there has been little in the nature of a "slump" or "break." Stocks are off in most groups, and bonds less positively. The bond index of *The Wall Street Journal* as published on November 8 for October, stood at 75.96 as compared with 77.47 for the preceding month, and since the beginning of November the downward movement has continued quite markedly. This has been particularly true in various foreign issues which were directly affected by the change for the worse of financial conditions in Europe. In the stock market, the recession has been simply due to a recognition that thus far there was certainly nothing to warrant the belief that there would be in the near future another great growth of business, whose consequence would be expansion of profits, with corresponding financial enlargement, and therefore a rise in the values of stocks. The market, in short, has been disposed to await positive evidence of better business conditions as a basis for higher prices, and in the absence of such evidence has been disinclined to commit itself to any further or more general advance of quotations.

III

Has Business Ceased Expanding? Much of the argument of those who still insist that prices of securities may be expected to go higher is based on the theory that business is only on the "threshold" of expansion and growth. This makes it desirable to form a conclusion as to the exact position that has been reached by industry and trade. First of all, the volume of traffic over the railroads is practically at record height, and with carloadings running more than 1,000,000 per week, is about as high as it can be expected to go, with existing facilities. In the field of staple products, the output of bituminous coal may now be reckoned at 11,100,000 tons per week, or practically maximum capacity in existing circumstances. Steel mills are now understood to be running at the rate of 75 per cent of capacity, while 80 per cent roughly corresponds to full pre-war capacity, and it is stated by expert steel authorities that

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practically everything over 80 per cent must represent foreign sales growing out of demand of other countries, as otherwise it would not be possible to secure the absorption of the output in this market. Steel demand, however, is falling off, and the latest report of unfilled orders made by the U. S. Steel Corporation, running to about 6,902,000 tons, shows a relative slowing-down as compared with recent months, although the absolute growth in the volume of orders is still considerable. On the whole, it may be assumed that the industry cannot grow much more at present due to limitation of the foreign market. As a matter of fact, it is not growing, as current figures show. What is true of the steel industry is also true of other staple enterprises.

IV

Close of the Building Boom. Figures now at hand for building during September show that for seven federal reserve districts the total amount of contracts awarded was about $244,000,000, a decline of about 15.3 per cent from August although it was still 7.4 per cent greater than a year ago. September, however, was the fourth successive month in which total contracts registered a decline. Unofficial figures for October and November point to the continuance of this decline, although work actually in process has continued actively in many sections. As for other building materials, prices which have been advancing sharply for a good while past, have reached so high a level as to discourage new building, and the same has been true of steel prices. This situation strongly suggests the belief that a turn of the tide has come in an important field of demand for basic commodities such as steel, lumber, and cement, so that, as already indicated, the volume of business, instead of increasing during the months to come, is more likely, if anything, to be slightly less than at present. A recession in the value of iron announced in November illustrates tendencies. If this prognosis is correct, the present decline in stock-market values may be regarded as simply an early anticipation, or discounting, of perhaps minor business recession, which is now in sight or in its initial stages.

V

Countervailing Factors. There are certain possible countervailing factors, or factors which may at any time operate to offset this tendency to recession in business. Important among them is the foreign trade situation. At the present moment, it is true, our foreign trade shows signs of serious reaction. Thus far, the Department of Commerce has issued figures only for the first 21 days of September; and they, as compared with a full month's exports, seem to leave us a favorable balance of about $85,000,000. This balance, however, would probably disappear if we had full figures for the entire month. Such full figures will doubtless show a volume of importation about as great as that of exportation; or, in other words, our favorable balance of trade which has now lasted since the beginning of the war will be wiped out. We are not able to sell freely abroad, because we do not find any means of financing our sales, and also because foreign countries have so poor a prospect of selling anything here on account of the new tariff conditions. A good part of this situation is the result of mistaken policy, and if the Administration at Washington should suddenly make up its mind to change the foreign policy followed for some time past, the result would be to bring into effect quite quickly new influences whose tendency would be strongly to

counteract the lack of demand proportionate to output which is largely responsible for the renewed prospect of a possible excess in production. Whether any such change in foreign policy will come or not, opinions differ widely. But such a situation must be contemplated because it is possible, and because such a letting in of European demand would promptly bring about much greater activity in our mills and factories.

VI

Is Financial Inflation in Prospect? Is there not, however, a possibility of action which would take the place of such an expansion of demand as has been referred to, and would in this way afford the necessary stimulus to prices, thereby helping to bring on a period of renewed activity? Many regard the possibility of credit inflation as holding out that prospect, since they believe that, with the great stock of gold on hand in the United States, it would be possible to make an enormous enlargement of our bank credit and hence of our technical buying power. There are some who believe that such an enlargement is bound to come and that it indeed is on the way. Such observers cite the increase in the loans at federal reserve banks which has carried the portfolios of these banks up to something like $914,000,000 on November 15, while loans of reporting member banks in selected cities have now been advanced very nearly $300,000,000 during the past few weeks. It should be noted, however, that so far as the figures can be analyzed, they indicate that the increase is due to loans made for actual business purposes, and not to loans made for speculative objects. That being the case, there is little to be said on this subject from the standpoint of inflation. True, there is always demand for inflation in Congress, and it might at almost any moment be possible for the pressure to become too strong and oblige our banking system to yield and admit poor or doubtful paper to its portfolio, thereby bringing about genuine inflation. Nothing of the kind is now actually in sight, and there is reason to believe that the best elements of the financial community are opposed to any action looking toward resort to it, and are fully alive to the danger. In these circumstances close attention to the policy of the federal reserve system is called for. Thus far, that policy, in spite of unduly low rates, is apparently conservative. A real test has yet to be made.

VII

Changes in Prices. The other aspect of the situation to which appeal is usually made in analyzing future prospects is the price outlook. As to this, it is to be noted that recent price indexes point to only very moderate advances. There was a slight upward movement in the federal reserve price index during September, while during October the commercial indexes showed a modest increase, which apparently has continued largely through November. Of late, advances in agricultural products, such as wheat and cotton, have been noteworthy, while the recent coal-mining difficulty and the shortage resulting from it, naturally brought about a limited artificial increase in the fuel and lighting items. There is little to indicate any very marked general advance; on the contrary, not a few items in the list of commodities upon which our index numbers are based, show recessions. The net result, with its very small growth in average prices, is in line with what has been predicted, and is not sufficient to give warrant for a belief that inflationary influences are as yet in anything like full swing. Still, the

chances seem to favor moderate commodity advances during the winter, and this is a state of things which necessarily has a direct influence upon bank credit, reacting upon it by encouraging the making of larger, and less absolutely secured, loans.

VIII

Maladjustment of Prices. One thing which continues to make against any boom in business is the unquestionable maladjustment of prices which has had the bad effect of preventing some classes in the community from buying as heavily as the total amount of their output would seem to warrant them normally in doing. This has been particularly true, at least until lately, in the agricultural regions, where farmers have found that their prices were still very far from being on a parity, relatively speaking, with those of manufactured goods, which they had to buy in considerable quantity. The price of labor (wages) has advanced considerably in a good many unskilled, or very moderately skilled, occupations, but there has been no corresponding advance in businesses involving a higher degree of skill. Maladjustment thus occurs between some groups of wage-earners and others, as well as between both, and the general price level prevailing in the commodity field. As this state of things has become more and more marked, it has unavoidably reacted upon the general condition of business, tending to slow down activities which would otherwise have reached a decidedly higher level, due to continuously rising demand accompanied by the use of purchasing power in controlling commodities. The latest Federal Reserve Board general wholesale price index number issued November 10, is 164 as compared with 165 for the preceding month.

IX

Activity of Retail Trade. Nevertheless, the advances in wages and the generally good condition of employment have materially promoted the activity of retail trade and seem to warrant the belief that such trade will continue to improve during the next month or two, thus giving every promise of a satisfactory holiday business, running on up to the weeks of the usual mid-winter reaction. Sales have been very satisfactory in almost all parts of the country, showing an increase at representative stores of anywhere from 1 per cent up to 19 or 20 per cent with an average of perhaps 10 or 12 per cent as compared with the corresponding period of last year. All this makes for high values in the stocks of retailing concerns; and those which are listed on the New York Stock Exchange have, of course, shown an unusual ability to move against the general current of prices, some of them advancing very decidedly within the past few weeks. The indications are that this class of stocks may be expected to continue moving upward for some time longer. Good activity in wholesale trade has naturally accompanied the advance in retail trade, and since this wholesale trade growth usually lags behind retail trade it would appear probable that gains in both will be maintained for some little time to come.

X

Foreign Trade and Financing Discouraging. In sharp contradistinction to the reasonably satisfactory securities outlook, and the well sustained business prospect in the domestic field which has just been depicted, the status of our foreign trade continues to be rather depressing, perhaps increasingly so. It is true that, just at the time of the adop-

tion of the new tariff law, and for some little while thereafter, there was a spurt in import and to some extent in export activity. Unusually large sums have continued to be collected in duties, but when it is remembered that these duties are levied at very much higher rates than under the older tariff law, it is at once evident that the sums collected must be taken with a great deal of reservation as any genuine comparative index to trade or business activity. Foreign financing in this market has fallen off still further within the past month, and is now at low ebb. Exchange rates have suffered severely from two factors,—the renewal of the Turkish disturbances and the failure of the Reparations Commission to announce, after its trip to Berlin, any feasable plan for the modification of the terms of the German settlement. As a result, German exchange has gone to a new low level not far above $\frac{15}{100}$ of one cent, while as was predicted in these columns some time ago, francs have tended to follow marks downward although at a considerable distance behind, reaching a new low level for the year of not far above 6 cents.

The most unfortunate feature of the foreign trade situation is found in the fact that there is so little prospect of any definite way out of it for some time to come. In these circumstances, of course, the continued presence of doubt as to practically all classes of foreign securities, from the investment standpoint, cannot be avoided. Weakness in franc securities, and even in those stated in sterling, has accordingly been a source of anxiety to holders for a good while past. It has grown more intense during the past month; and, unless there is a decisive change for the better in the near future so far as relates to reparations prospects, it may be expected to continue.

XI

Banking and Credit. There is an interesting interrelation between this foreign situation and the banking and credit outlook. During the spring and summer, our surplus investment funds were being very rapidly taken up in conjunction with operations in the foreign field, and this bade fair to constitute a steady drain upon our money market. As the revival of domestic business grew, foreign business fell off, and the result has been to shift funds from one to the other, the consequence being to prevent as rapid a rise in rates of interest as would have occurred had domestic business expanded when foreign financing was holding its own. As things have stood, the upward movement of money rates has been slow and retarded, although real. The total volume of brokers' loans in the New York market has been greatly curtailed, although call funds have usually been from 4½ to 5½ per cent, with time funds around 5 per cent, and commercial paper not far from the latter figure. These are moderate costs; but they have been so moderate largely because aggregate demand for bank accommodation has been kept down as low as it has been. The stock and investment market has thus been singularly favorable during the past autumn from the financial standpoint, and there would seem now to be reason for thinking that, with the autumn crop moving demands over and business not quite so active as formerly, any great aggravation of interest rates might be avoided. The drift, however, is undoubtedly still toward a somewhat higher level of charges for all classes of funds. This should mean that a somewhat parallel drift in the prices of bonds may set in, their values moving toward a lower level as the current value of money climbs upward. Evidence of such a movement is already afforded by

recent quotations for gilt-edged securities, in which the element of risk is reduced to a minimum. Striking in this connection has been the recession of Liberty bonds and the apparent inability of these securities to recover their old standard of current values.

XII

Some Conclusions. There is nothing to cause serious doubt concerning the general continuance of a moderately prosperous condition of business and employment during coming months. The most serious effects of the coal strike have been avoided. A very satisfactory harvest has been gathered in most agricultural lines and prices are better than for some time past. Buying power is fairly well distributed and shows itself in marked improvement in wholesale and retail trade. Securities, however, have undergone a backward movement, and this on the whole, may be expected to continue moderately for some time to come. Such recession is due to the fact that business, having apparently reached its top level for the present, cannot hold out much in the way of promise for the future, so that stocks are inclined to "discount" a lower level of activity rather than a higher. Change in foreign trade relations, or the advent of credit inflation, might alter this condition, but neither is now in sight, and apparently only a slow upward movement of commodity prices is to be expected during coming months.

EDITORIAL REVIEW

POLITICAL INEFFICIENCY

The great lack in our present-day political leaders is, apparently, intelligence. As far back as 1887 Simon Cameron was asked how he had achieved his political leadership in Pennsylvania. His reply was informative and interesting:

"Sonny," said he, "I watched for the biggest crowd and then I walked in front of it." Then he added, his Scotch-Irish face wrinkling with astute sagacity, "*but never too far in front.*" *

This could hardly pass as high principle or ideal statesmanship, but it did show a certain shrewdness, that now seems lacking. The Republican leaders of today got the "biggest crowd" behind them in 1920, but forgot to walk in front of it. Instead they fell far behind the crowd they were supposed to lead.

To illustrate, in 1919, Senator Penrose was asked if the tariff was to be the Republican issue in 1920. "I wish it might be," he said. "I believe in the tariff, but I am sorry to say the tariff has become a back number." Two years later, however, the Republican leaders regardless of where the biggest crowd was going, passed an exceptionally drastic tariff law. They also did other things equally lacking in statesmanship and in timeliness, and meanwhile left undone many other things they should have done. In the recent election they received their reward.

This would be the more satisfactory if their political opponents were any nearer to meeting the needs of the country. Unfortunately they, too, seem equally to lack statesmanship and political sagacity. Apparently neither side has the intelligence needed to get in front of the crowd rather than behind it—to lead instead of following blindly and afar off.

A man cannot practice law until he has prepared himself and has been examined as to his competence. Why should not similar or higher standards be prescribed for those who are to make our laws? If our psychologists would but rise to the occasion they might devise a test that would give a reliable intelligence classification for legislators. It should be made at least difficult enough to sift out those who are incompetent.

The problem is not easy. In our country there is no lack of the trained intelligence necessary to give us sound legislation, if it could be sent to Washington for the purpose. But it is not sent—as a rule. Business men are prone to condemn the labor unions for the class of leaders they choose, but they themselves, do little better.

* Talcott Williams "After Penrose, What?" in November *Century*.

LEADERS OR DEPUTIES

Our government was intended to be representative—a government conducted in its manifold functions by representatives of the people. If the function was judicial it was supposed a man would be elected or appointed who was just, intelligent, and skilled in law. If a governor or president was to be elected it was intended that a man with natural executive qualities should be chosen. In the case of our legislators, congressmen, and senators, it was intended that the voters should select men with education, experience, and ability—men informed on public matters, and as to our relations with foreign nations, who might intelligently act for the best interests of the community;

not necessarily as the community wanted or instructed them to act, but as they in their broader knowledge and greater familiarity with the affairs of state should decide.

It was, in short, expected that those who legislate for the nation should be as competent to discharge their duties, as are lawyers, doctors, and engineers in their respective professions. And if this were the case they would as in the case of other experts and professional men, naturally regard any attempts on the part of their constituents to influence their judgment or legislative action just as other experts would regard efforts intended to influence the professional discharge of their duties.

* * *

Of late years, however, the idea has taken deep root in the popular mind—and apparently in the minds of congressmen and senators as well that our legislators are merely agents or a kind of clerk employed to put into effect the will of the masses. Accordingly when a live issue arises the voters laboriously and expensively attempt to influence and inform their representatives by a multiplicity of telegrams, postcards, letters, and other propaganda.

Accepting these dicta as a veritable *vox dei* many of our representatives decide public questions by weighing or counting the letters of advice they get from either side. In other words, they "side-step" their responsibility and abdicate the high function assigned them by the founders of our government to become the clerical recorders of irregular referendums in which the parties with the most funds, the most energy, and the most skilful press agents usually succeed.

The general result is that matters of the gravest import may be settled, not according to what representatives think after careful investigation and study, but as the representatives are directed by these, usually, one-sided referendums.

* * *

This method of instructing legislators is justified on the ground that ours is "a government of the people, for the people, and by the people," and that this method brings the governmental acts and responsibilities closer to the governed. But the actual work of government cannot possibly be done by the voters directly and wherever co-operative or group action is required it must be taken by selected representatives or officials. A ship could not be navigated by the crew, though it is said that in the earlier days of the social revolution, some unsuccessful experiments along this time were tried by the Russians. A corporation cannot be managed by the owners of its stock, but they must select a board of directors. For the same reason a government by the people taken literally is impossible.

Further, in a large and populous country with a complex social and industrial system it is impossible that the average citizen can have time, knowledge, and judgment to investigate, decide upon, and draw up the necessary laws. He should, therefore, do as he does in other cases where he faces problems beyond his skill, select a representative who can give the time, attention, and trained ability that he cannot. He has the right of selection in all such cases. If he selects a half-educated physician he may lose his life—if he selects a shyster lawyer, he may lose his case—if he selects for his legislator one whose main qualification is good fellowship, he will probably pay for it in increased taxes, higher prices, and other disadvantages. Also, generally, when the people elect representatives who lack initiative and independence and vote only as instructed by referen-

dums, propaganda, and avalanches of letters, they are abandoning one of the important principles of our republican institutions.

ECONOMICS AND MODERN BUSINESS

At the recent meeting of the American Bankers Association, the bankers of the country declared for a campaign "to teach sound thinking along economic lines."

Economics is that body of systematized facts that relate to material development, to the production, preservation and distribution of wealth, and to the well-being of the state, the family, and the individual. No business or business man exists whose work is not related in some way to some phase of this vital science. The fact that economics is thus closely interwoven with every phase of business activity is what differentiates it from the old political economy, appropriately termed "the dismal science." Obviously anything that pertains to increased production, more effective distribution, better salaries and wages and better living conditions is not in these days of striving for efficiency to be classified as "dreary."

The immediate advantage of economic knowledge for business purposes lies in the more intelligent disposition and use of the material assets of the business, in the better understanding of the wants of its customers, in a better appreciation of the feelings and point of view of employees, and, generally, in the better control and direction of the business as a whole.

Each line of business activity can be taken up in turn and the most obvious and necessary economic information indicated. A banker would obviously derive advantage from a knowledge of all that pertains to the use of money, and its vital functions in the processes of manufacture, transportation, and distribution.

A manufacturer would be better off if he clearly understood the laws of supply and demand, the basic principles of the modern industrial system, the ancient theories as to wages, and the saner modern efforts to adjust the relations between labor and capital.

A jobber should know what relates to the problems of distribution; he must likewise be skilled in the principle of exchange and the laws of credit; he must have wide knowledge of markets in which to buy or sell; he must recognize in advance the effects of governmental interference with economic law by tariffs, subsidies, and other arbitrary action.

To have an adequate idea of one's own part in the social economy it is always necessary to have a general knowledge of the whole, broad field. In this matter the definition of a well-educated man applies: "One who knows a little of everything and all of some one thing." A man in modern business should have a broad knowledge of the whole field of economics and an intensive knowledge of the subject as far as it relates to his own particular vocation.

Much of this economic knowledge can be—and usually is—acquired in the school of experience. A more systematic and more thorough reading and study than is customary in that very expensive and unsatisfactory institution of learning would show better results.

BUDGETARY CONTROL

From the standpoint of safe operation and general control the budget is one of the important developments of modern business. Through it the activities of the various operating departments are co-ordinated and tentatively fixed—one month—three months—or even a year in advance.

This budget gives each department a measure of accomplishment to which it is expected to attain. If any department falls behind its budget requirements, that fact is in itself a danger signal calling for immediate attention —for rectification or adjustment of the special conditions of that department, or if that cannot be done, such adjustments in other departments of the business as may be necessary to meet the changed conditions of the particular department.

From the executive's standpoint a monthly budget gives him at the beginning of the month—instead of waiting until some time in the following month for his financial reports—a fairly accurate statement of what the business for the month should be, and will be, if normal conditions obtain. The very great advantage of this information in guiding the business, in planning for the future, and in avoiding disaster can hardly be overestimated.

While all this is true, the use of the budget is by no means general. Except in a very elementary and incomplete form, it is safe to say that it is not used in the majority of the businesses of the country—not used because its advantages are not appreciated and its methods are not understood.

* * *

The situation is not, however, discouraging. Current testimony to the growing recognition of the value and wide usefulness of the budget is interesting. In a recent statement General Charles G. Dawes, formerly Director of the National Budget said:

> Budget making in the government is the only hope of curing the disgraceful conditions that have existed for 132 years.

More recently General Lord, the present Director of the National Budget, in addressing a federal business meeting in New York on the subject of "Government Deficiency in Economic Methods" paid a strong tribute to the value of the budget. As reported in *The Wall Street Journal* of November 10:

> General Lord said a policy of economy was a definite one now for the government. Heretofore, there was entire lack of co-ordination in government departments. This evil was the greatest drawback to the country. Before the establishment of the budget committee, one department never knew what the other department was doing. Now in the forty-three government departments there is absolute teamwork, under control of the budget director and his staff. At the end of the present fiscal year it will be found that millions of dollars will have been saved through this policy of careful supervision and co-operation by all. No individual can do without a budget. The poorer the family the more need of a budget; the same holds true with the government.

As to the budgetary and forecasting articles appearing in *Administration*, Arthur Lazarus, cost accountant of the United States Chamber of Commerce, writes: "I do not believe you can give too much attention to the budget. The time is just ripe for it." And in a recent letter commenting on the articles now appearing in *Administration*, "Business Forecasting in the Edison Industries," William M. Lybrand, one of the prominent accountants of the country, says:

> Budgetary control of business and the establishment of standards are undoubtedly matters which are receiving more and more attention from business men as well as students of business affairs. Articles such as the ones to which I am referring are therefore timely and important,

BOOK REVIEWS

AMERICAN BANKING PRACTICE

By William H. Kniffin, Vice-President, Bank of Rockville Centre, Long Island. xii, 389 pp. McGraw-Hill Book Company

REVIEWED BY J. R. BURROW, JR.*

The purpose of this work is to "give (in one volume) a complete summary of the operation of a bank in such form as could be used as a text for teaching." The author's purpose has been satisfactorily accomplished.

A careful reading of the table of contents makes me wonder whether so many subjects can be covered in 381 pages. I am surprised to observe that this includes the Negotiable Instruments Law—a feature of practical value. Practical—that's the word. That describes the book. When I had read a few chapters I saw some things to criticize but—and this is the significant thing—I knew that my copy was going to be called to the attention of our own clerks and that new employees will be asked to read it.

I do not believe I know another book on banking that tells all the little things: How to keep a record of registered mail, for instance—an intelligent discussion of protest. And yet I find that the federal reserve system can be comprehensively expounded in non-technical language in 34 pages. The little things have not crowded out the big things.

I should guess (because I do not know) that Mr Kniffin is a banker first and a financial writer second. His banking is slightly better than his writing. The building and loan amortization plan "gives the borrower more at the beginning but compels him to reduce the debt systematically, making the loan better as time goes on, and is the perfect way for mortgage loans."

At times, the philosophy of banking gives relief from a mass of detail concisely set forth. "The Master Mind" is sensible:

> I find that in most banks there is a master mind. It may be the president, or it may be a humble director who has not the dignity of an office, yet rules the day. Committees are appointed as a matter of course, but the master mind rules. It is my belief that a bank should be run by executives who know banking and are given certain rights and duties. If a man is fit to hold his job, he is fit to be given and to assume responsibility. If he will not assume the cares of his office, he has no right to its compensation. If he cannot make decisions, let him hire some one who can.
>
> The true function of the committee is advisory. At times the individual needs the combined advice of many minds reaching an agreement; and at such times the committee truly functions. But to hold over every proposition requiring attention until a committee can meet and discuss it retards the work of the bank, badly cripples the executive officers, and breaks down the good-will. In fact, it is most embarrassing, to say the least, to an executive to be restricted by rules and regulations, laid down by a committee, that cannot be and ought not to be followed. The true executive makes mistakes, but only one of the same kind. He takes losses as incidental to business. He is right 90 per cent of the time and the other tenth does not matter.

And I like the paragraph about the bank president who is an executive:

> In the large banks he is the real head of the bank. He dreams its dreams, sees its visions, thinks out its problems, and promotes its welfare. He it is who effects consolidations with other banks, and builds up an organization that reflects the spirit and the ambition of the bank. He plans campaigns for business extension, conceives new avenues for growth and expansion, and handles the large problems that come into the bank for solution. He is placed on committees of the various bankers' associations, and represents the bank in business and banking organizations. He makes addresses and moulds public opinion.

A touch suggests the persevering influence of memory. "Bookkeepers must be

* Vice-President and Treasurer of the Central Trust Company, Topeka, Kansas.

good penmen." The older men in the profession will agree and add a complaint that machinery has come too much into use. They may be right.

I have one serious criticism. I make it often. Too much importance is attached to deposits which are created by the bank. I do not believe this author really thinks that his problem leaves the correct impression. A bank has $10,000 Cash and Sight Exchange, $100,000 Deposits and therefore a 10 per cent reserve. John Doe deposits $1,000; the bank lends Bil Smith $10,000 and credits his account with all of it. The bank now has "Cash and Sight" amounting to $11,000, deposits of $110,000, and a 10 per cent reserve. All of which is true, temporarily. But the impression is given that the bank has thus created a deposit of $10,000 and was enabled so to do because John Doe deposited $1,000 in currency. Now if Bill Smith does not draw out at least $8,000 he's a poor business man—he borrowed too much money. If he does so in a few days, the bank has "Cash and Sight" of $3,000, deposits of $102,000 and the reserve has fallen to slightly more than 3 per cent. As a matter of fact, outside the large cities, most borrowers draw out *more* than 80 per cent of the proceeds of loans just as soon as they can. The National City Bank of New York, I am told, has stopped the New York practice of even asking that 20 per cent be left on deposit and has cut the amount to 10 per cent.

Mr. Kniffin, however, has the authorities on his side of the question. I do not know anyone else who questions the traditional statement that banks can create ten times as many deposits as they receive over-the-counter deposits. It may be possible in New York, though I do not believe it is. It cannot be done at the present time in Topeka, Kansas.

KLASSISCHE VALUTA-STABILISIERUNGEN UND IHRE LEHREN FÜR DEUTSCHLAND

(Classic Stabilizations of Exchanges and Their Value for Germany)

By Dr. Carl A. Schaefer. Verlag C. Boysen, Hamburg

Reviewed by Dr. Max Winkler*

While the stabilization of the mark is admittedly impossible as long as causes exist which, notwithstanding all devices of any international consortium for regulating, compel it to depreciate further, leading economists on both sides of the Atlantic are occupying themselves with the problem of how to bring an end to this almost fraudulent mark selling system. Since most of the contributions appear, however, to sacrifice value in behalf of volume, it is indeed gratifying to see that one of the latest contributors to the question of stabilization of exchanges, has produced a really valuable piece of work which, in addition to its theoretical value, seems to have practical value as well. We refer to "Klassische Valuta-Stabilisierungen und ihre Lehren für Deutschland," by Dr. Carl A. Schaefer. Without ignoring the present exchange problem, the author endeavors to draw conclusions from and find remedies in past experiments, in a manner similar to the one employed by Professor Bonn in "Die Stabilisierung der Mark" which was prepared in the early part of the current year at the special request of the German Ministry of Finance.

The author distinguishes three methods of stabilizing demoralized exchanges, viz., the artificial, the natural, and the seemingly artificial. Artificial stabilization is brought about by the contraction of a foreign loan by the country involved, for the express purpose of stabilizing its exchange. Natural stabilization may be accomplished by the country itself or with the aid of foreign credits extended on the

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strength of the country's increased productiveness and prosperity. Seemingly artificial stabilization takes place when exchange gradually reaches a level at which it is stable or becomes stabilized at once, as was the case with the stabilization of Argentine exchange in accordance with the ideas of Tornquist (1899); the stabilization of the Indian Rupee under Lindsay (1898–99); the stabilization of the German-East-African Rupee (1904); and the stabilization of the Ruble under Witte (1896).

A somewhat detailed account of the methods according to which the above "classic" stabilizations were brought about, is also presented.

With regard to Argentine, advantage was taken of the improvement which took place in the early nineties in Argentine exchange as a result of influx of capital, notwithstanding the fact that the governmental budgets continued to show marked deficits. In this way, there was brought about a seemingly artificial stabilization of the paper peso, preventing it from rising further and using the favorable balance of payments resulting from credits for the accumulation of a gold reserve. Further appreciation in the value of the peso was prevented by an arrangement with the Caja de Conversion, under which the latter agreed to issue notes in exchange for gold at the rate of two and one-half of the former for one of the latter and conversely, to exchange gold for notes. The success of this stabilization scheme was contingent upon the continuation of a favorable balance of payments which enabled Argentine to accumulate gold.

The Lindsay scheme consisted in the raising of the value of the rupee by contracting it to the value of one-fifteenth of one pound. The Indian government would always issue 15 rupees for one pound, thereby preventing the rupee from rising above that level. In order to prevent it from declining below that figure, a gold standard reserve was instituted in London, with the support of which the stability of the rupee was maintained through the maintenance of a favorable balance of payments.

The Witte scheme consisted in letting the value of the ruble rise until it reached a certain higher level, and not in devaluating the ruble by fixing it at existing low levels. Here, too, stabilization depended on a favorable balance of payments which tended to improve the value of Russian exchange. Gold was gradually accumulated and stabilization at the rate of one and one-half paper rubles for one gold ruble was not officially announced until it had actually taken place.

It is obvious that the success of each method involves the existence of a favorable balance of international payments caused by credits—a *geborgt aktive Zahlungsbilanz.*

In applying these various schemes to the mark problem, the author finds that the Witte method is impossible, because it could not lead to stabilization of the mark within a reasonable period. There remains, therefore, either the method of artificial stabilization on the basis of a guarantee by a foreign country, or an international consortium, or a natural spontaneous stabilization with the assistance of credits similar to those which aided Argentine in the nineties. Artificial stabilization is well-nigh out of the question according to Schaefer, because such a scheme would impose on the guarantor a very heavy burden, say 300,000,000,000 paper marks—assuming reparation liabilities unchanged—for conversion at a fixed rate. If this were fixed at 300 marks to the dollar, a conversion loan of about $1,000,000,000 would be required and an additional amount for a reserve fund. If, on the other hand, reparations which at present are admittedly impossibly high, were reduced to a sum which Germany could pay, artificial stabilization would be needless, since capital would readily flow into the country, resulting in a favorable balance of payments caused by credits which would support exchange. Schaefer concludes that it is essential that reparations be adjusted to exchange instead of attempting to adjust exchange to reparations. At any event, since stabilization is impossible without a solution of the reparations problem, it is of prime importance to grant Germany a moratorium for several years and scale down substantially later reparation pay-

ments. Summarizing, Dr. Schaefer considers the following steps as essential to a natural stabilization of the mark:

1. Moratorium for several years—Reduction of later reparation payments. Foreign reparation loan of several billions of gold marks.

2. Result: Increasingly favorable balance of payments caused by credits and a natural "relative contraction" in the amount of notes in circulation.

3. Rise in the value of the mark to the verge of a deflation crisis.

4. Official announcement of future stabilization rate.

5. Attainment of stabilization rate.

6. Influx of gold to the Reichsbank; issue of gold notes on the basis of stabilization rate.

7. Creation of a stabilization reserve.

8. Consolidation of the floating debt.

9. Adoption of a new system for the issuance of notes by the Reichsbank.

10. Elastic reparation payments.

11. Denomination (i.e., uniform reduction of all payments in marks by one-tenth, for the purpose of reducing the present huge amounts).

GARCKE AND FELLS: FACTORY ACCOUNTS

By J. M. Fells, C.B.E. xx, 290 pp. D. Van Nostrand Company

Reviewed by John M. Scanlon *

This is the seventh edition of this book, the original of which was "the first attempt to place before English readers a systematized statement of the principles relating to Factory Accounts."

The contents of the book are as follows:

Foreword
Chapter
1. Introductory
2. Labor
3. Stores
4. Prime Cost and the Cost Ledger
5. Indirect or Incidental Expenses and Their Allocation
6. Fixed Capital and Depreciation
7. Machinery Use
8. Stock
9. Surveys
10. Subsidiary Books

Appendices
A. Nomenclature of Machine Details
B. Rating of Factories Containing Machinery
C. Table for Determining Amortization of Leases, etc.

Glossary of Terms
Index

The "Foreword" chapter is devoted to a brief history of the development of the factory system in England and statements of the benefits to be derived by the factory management from the use of an efficient cost system.

An outline of the methods to be employed in recording the time of employees by means of mechanical time recorders and written time records is given and a system explained which will permit keeping a perpetual inventory. The clerical work incidental to the purchasing, receiving, storing, and issuing materials is explained, and the author urges that a periodical inventory of materials be taken rather than having this done all at once at the end of the year.

The method of recording the labor and material on the cost ledger is explained, as well as the handling and distribution of overhead expenses. The various methods of distributing overhead are explained, namely, on the basis of productive labor, prime cost, and machine hour. The disadvantages of the productive labor, and prime cost methods are cited, and the machine hour basis is recommended by the author.

In Chapters 6 and 7 the various methods employed in setting up depreciation are explained and the author shows how depreciation rates may be determined for different classes of machinery.

"Appendix A"—(Nomenclature of Machine Details) consists of a paper read before the American Society of Mechanical

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Engineers, by Oberlin Smith, President of the Ferracute Machine Company, of Bridgeton, New Jersey, in which it is urged that symbols be used for the different parts of machinery.

"Appendix B"—(The Rating of Factories Containing Machinery) states that the tax assessments in England originate with the Overseers of the Poor, and assessment committees, and in practice the greatest diversity prevails in computing the assessments, depending on the location of the factory as to the method which will be used in making the computation.

The Glossary of Terms contains about ten pages, giving definitions of the terms used in the book. Such terms as Amortization, Appreciation, Assets, Balance Sheet, Book Value, Capital, etc., are clearly defined.

The Index consists of twenty-seven pages, and affords a ready reference for the contents of the book. A number of forms and charts is given in explanation of the reading matter.

The Preface of the book states that the aim of the author "has been to show not only that as great a degree of accuracy can be attained in factory bookkeeping as in commercial accounts, but that the books of a manufacturing business can scarcely be said to be complete and reliable unless supplemented by, and largely based upon, the accounts special to a factory."

This work, therefore, should prove of value to those having to do with the installation of a cost system, but it will, however, no doubt be found that the systems explained in this work have been considerably improved by manufacturing companies in this country.

PAPER MONEYS OF EUROPE

By Francis W. Hirst, Editor of The London Economist, 47 pp. Houghton Mifflin and Company

Reviewed by A. M. Sakolski *

The sum and substance of Mr. Hirst's contention is that unless the European nations get busy very soon to re-establish complete peace, to disarm, to abolish conscription, to reduce their "bloated" bureaucracies, and to lower tariffs which will allow the miserable half-starved populations to renew the arts of peace and the blessings of trade, the paper currencies will continue to depreciate, with the accompaniment of further moral and political degeneration of mankind. No one can dispute the significance of this conclusion, though some exceptions may be taken to Mr. Hirst's implications that the nations of Europe today as well as the American Revolutionary government of old that have resorted to paper currencies did so in order to effect a confiscation of private property or to deprive some citizens and individuals of their wealth in the interests of the rulers of the existing governments.

As a species of "knavery," currency inflation cannot be much different from the spread of epidemics. When conditions exist which cause diseases, we must expect continuous suffering until the conditions are removed. No modern government—not even Germany in spite of the contention of certain French politicians,—purposely and conscientiously resort to currency inflation. Moreover, no modern nation has ever conducted protracted and destructive warfare without the expedient of paper currency. Napoleon, because of the tribute and booty received from his vanquished enemies, succeeded for a time in keeping France from resorting to excessive issues of paper money, but after his defeat in Russia, he, too, took to forced borrowing and left the Restoration Government with a large floating debt to fund.

Great Britain has not been free from the curse, for during the Napoleonic Wars, the depreciation of the Bank of England notes, due to suspension of specie pay-

* Formerly Economic Expert of the Equitable Trust Company, New York City.

ments, produced one of the most interesting and instructive economic controversies that history records. It was at this time that David Ricardo, the English financier, wrote his essays on the "High Price of Bullion," which gave him the rank of the foremost economist of his time and the father of modern political economy.

As an appendix to his discourse, Mr. Hirst inserts in the book, extracts from "The Reports of the Brussels Financial Conference of 1920," largely, no doubt, to prove that he has support of his views on the part of the 86 financial experts assembled at this gathering. That the nations of the world have failed to follow the advice and recommendations of this conference is not due, as Mr. Hirst intimates, to wilful "knavery." Modern national governments, which must have popular support of some kind, are frequently confronted with both conditions and theories, and, under the circumstances, it is quite likely that the conditions will compel the discarding of the theories.

The contents of this book include the substance of lectures given by the editor, Mr. Hirst, at New York University, the University of California, and several other leading American universities. If this book causes as much discussion as his addresses before academic associations have done, it will possess considerable influence, and make clear the moral and economic significance of the inflated paper currency of Europe.

THE UNITED STATES RESERVE BANK

By Honorable Charles N. Fowler. 88 pp. Hamilton Book Company

Reviewed by James D. Magee*

In the Foreword the author claims that he made the first draft of the Federal Reserve Act in 1910. W. J. Bryan, however, spoiled it by making the notes primarily government notes.

The result may be indicated in the author's own words:

> If we but had the wisdom to comprehend and the courage to weigh accurately and impartially the folly and madness of many of our acts during the past few years, we would perceive that these very same Federal Reserve Notes were the chief, if not the only cause, of that wild expansion, that insane inflation, from whose dizzy heights of high prices and flush times we are now very slowly and very painfully descending; and the end is not yet!

The first attack then is on the federal reserve notes. He is afraid that by Gresham's Law they will drive out all of our gold. This is a new interpretation of Gresham's Law. He is particularly disturbed because the federal reserve notes are used by state banks as reserves and by National banks as till money. If people do not constantly use gold coin he fears that they will be in a frame of mind that may easily lead to a gold panic.

There is next given the warning that freedom from politics is essential to sound banking.

The author's proposal is for a central bank called the United States Reserve Bank. This bank would hold gold for international operations, for seasonal demands, and to control credit. It would be controlled by a court of Finance composed of seventeen members, eight bankers and eight business men and one presiding member, all appointed by the president with the approval of the Senate.

The central bank would have 50 branches built up around the clearing houses of the principal cities. The examinations of the clearing houses would replace the present state and national examinations.

All state and national banks would join from motives of self interest. The big differences from the federal reserve system are that the member banks would hold gold reserves in their own vaults instead of in the federal reserve banks and would issue

* Professor of Economics, New York University, New York.

the bank notes. He allows a transition period of four years to replace the federal reserve notes with the notes of local banks. He proposes for soundness to clear this currency just as checks are now.

The author charges that the whole federal reserve system is dominated by the ex officio members of the federal reserve board. He also charges that the board has been guilty of tyranny and brutality in enforcing par check collection, and four pages beyond calls the Suffolk Banking System "the most perfect banking system that has ever existed in the world." Evidently Mr. Fowler does not know that the Suffolk Bank used exactly the same methods to enforce redemption of notes that the federal reserve Banks are accused of using in their efforts to make possible universal collection of checks at par.

PRODUCTION ENGINEERING AND COST KEEPING

By William R. Basset and Johnson Heywood.
vii, 311 pp. McGraw-Hill Book Company, Inc.

Reviewed by G. W. Greenwood *

As its title implies, this book may be divided into two distinct parts: One dealing with industrial engineering; the other, with cost keeping.

The methods of cost keeping as outlined are unnecessarily complicated. The cost accounting forms could be greatly simplified, at the same time giving more detailed information. The general ledger is made the medium of control for a large amount of cost data, which could be handled more simply and clearly without appearing on the general books.

The industrial engineering section covers ground naturally familiar to readers in this field, but with a wealth of illustrative concrete examples which should appeal to everyone. One cannot read this book without thoughtfully contemplating the state of affairs in his own factory; and in the course of such reflections he must undoubtedly discover some method of reducing expenses or of reducing the amount of money tied up in the business.

For instance, under production planning we read:

> In one machine shop . . . the planning system reduced the goods in process from $3,000,000 to $1,000,000 in spite of an actual increase in sales. That means that $2,000,000 in cash was picked out of the goods in process inventory and was available for other purposes.

Under purchasing we find:

> We have seen obsolete stock sold at less than 25 per cent of cost . . . all because of unregulated buying. Conditions of this sort exist, as a rule, where the size of orders is left to the judgment of the purchasing agent. It is emphatically out of his province to determine how much to buy, when to buy it and when it should be delivered. Those questions can best be settled only by someone closely in contact with the shop and the sales department.

For instance, here is an incident related to the reviewer recently: In a certain pump factory there was a sudden increase one month in the sales of a particular type; the purchasing agent promptly ordered parts based on this increase in sales; he was using a series of signals. Too late it was found that the increase was due to a single order for an emergency job which was never likely to recur, and sales dropped promptly back to their former level. In the meantime, thousands of dollars had been tied up in needless supplies. At another time postings were made to the wrong cards, and the factory ran out of material because his system showed an adequate stock on hand.

Here is another paragraph which needs to be taken to heart by every executive:

> If the bookkeeping and stock-keeping methods used in most plants are compared it appears that money is of great value until it has been

* Secretary, United Refractories Company, Dunbar, Pa.

transformed into material, whereupon what happens to it becomes of no moment. Executives must O K expenditures and sign checks, and, apparently, the greatest of red tape is warranted if they make sure that no penny goes out of the business without a good reason, and that a proper charge for it is made against something or other.

But when the money comes back into the stockroom as material the owners seem to lose all respect for it. The receiving clerk will "guess" that it is all there. Many manufacturers do not even lock it up; just let any workman who "needs" it help himself.

Are there many factory managers who can plead "not guilty" to this indictment?

In discussing the value of engineering we read:

In one plant where a plate had originally been made of 1/4-in. cast iron, the design was changed to copper, but the thickness was not changed. A sheet of 1/8-in. copper would serve the purpose equally well and when the change was made, almost $13,000 was saved annually.

An example is cited of $13,200 worth of tools needlessly tied up simply because more were used than necessary, fewer tools being needed when each was in use a normal amount of time.

The book contains an abundance of forms but it is understood, of course, that one should select only such forms as he individually needs and that any system employed must be decidedly elastic.

This section of the book is replete with valuable suggestions.

WHAT'S WHAT IN THE LABOR MOVEMENT

Compiled by Waldo R. Browne. VIII, 578 pp. B. W. Huebsch, Inc.

Reviewed by Kossuth M. Williamson*

We have had dictionaries in other fields of knowledge. Now we have a dictionary of labor in the recent book "What's What in the Labor Movement," compiled by Waldo R. Browne. The book is nothing more than descriptions of labor practices, labor organizations, government agencies having to do with labor, in addition to definitions of characteristic terminology found in labor literature.

The alphabetical arrangement of the book makes it easy for reference. It contains a great deal of heterogeneous information, bearing on very familiar topics and less well-known subjects. On the same page with "Bolshevism" one can find a reference to "bohunk." These odd bits of labor terminology form an interesting part of the book. What, for instance, is a "clearance letter," a "crimp," "fat," or a "sand hog"? What are "Wobblies," "scissorbills," and "finks"? What is the meaning of "smooting," of "labor audit," of the "Norfolk Idea"? The general reader may not be familiar with these terms, and yet they have their place in the labor world, and short definitions of them can be found in Mr. Browne's book. The author has not limited himself to American terms but treats those of foreign countries, too, such as *Yuai Kai* (Japanese), *Clarté* (French), "stab work" (British), *subbotnik* (Russian), *hartal* (Indian).

In appraisal of the book, one must, of course, admit that, like most reference books, it contains nothing original. The descriptions also are manifestly too brief to contain much information. For instance, it devotes only two pages to the American Federation of Labor, less than a page to Bolshevism, about a page to profit sharing, and no more than one-third of a page to index numbers. But the compilation of such a dictionary was a rather heavy job for one man. There is probably still a place for a more exhaustive book of this nature, edited by one man but written by experts on each subject. It would do for labor what has been done for Economics in the English by Palgrave's "Dictionary of Political

* Professor of Economics and Social Science, Wesleyan University, Middletown, Connecticut.

Economy." Undoubtedly, however, Mr. Browne's compilation will serve well as a handy reference book for busy executives and laborers who cannot find time to read more exhaustive treatments of these subjects. For this reason the author has done a good service in laboriously bringing together such a compilation.

A CENTURY OF BANKING IN NEW YORK

By Henry Wysham Lanier. 335 pp. George H. Doran and Company

Reviewed by E. P. Maynard*

The editor demands payment of my promissory note to comment about his book. He said that if I would give my impressions of the book and indicate its contents I would be giving him just the sort of review he wanted. Following his suggestion, I may say that I have been greatly interested in reading a copy of "A Century of Banking in New York." Even the author's dedication is interesting, as the reproduction below will show:

Dedicated
to
The Ferocious City
which devours and forgets
its own history

In the prefatory note, Mr. Lanier, the author, thus sums up the origin and development of his book:

> This volume had its origin in a plan to commemorate the centenary of a Trust Company—the first corporation ever authorized to accept trusts.
>
> A study of financial history showed a wealth of material, and an absence of any general work covering the development of banks and banking during this century of transformation; so the scope was enlarged to a comprehensive survey of the business and financial conditions of a hundred years ago, with special emphasis on the personal side, and a narrative of the growth of New York to its present financial position. In the general picture, the intimate history of the particular trust company offers significant details of a "sample brick" in the whole edifice that has been built up.

Especially interesting to me was the author's romantic story of banking in "little old New York." It is interesting to read, for example, the account of when pigs roamed in Wall Street, and public pumps were on Broadway—possibly to water the stock on the other thoroughfare. In the opening chapter where these accounts are found, one reads about the "Boom Town" of Greenwich—a haven of safety for bankers when epidemics ravaged Wall Street in the great plague of 1822.

In those days, local newspapers printed such advertisements as:

> The Phenix Bank is removed to the west wing of the Car Factory, at Greenwich, corner of Asylum and Ames streets, and will be open for business during the usual hours.
>
> *J. Delafield, Cashier.*
>
> * * *
>
> The American Insurance Company have removed to No. 554 Broadway, the second house above Prince Street, in the rear of the Roman Catholic Cathedral, and have likewise an office in the house of W. L. Underwood, Esq., Hammond Street, Greenwich.
>
> * * *
>
> The North River Insurance Company have removed their office to 299½ between Reade and Duane Streets.
>
> N. B.—For the convenience of persons residing at Greenwich and its vicinity, a box for the reception of applications for insurance has been placed at the office of Charles Graham, Esq., in Perry, between Herring and Asylum Streets.

One of the illustrations for this chapter shows men sawing wood on Wall Street.

Chapter III, tells of the fluctuations in currency values, indicates the abuses of the financial system then used, and points out the injustice worked by depreciated notes. The chapter which follows contains speci-

* President of The Brooklyn Trust Company, Brooklyn, New York.

mens of notes issued by New York banks during the early part of the nineteenth century. They remind one of the shinplasters of Civil War days and of the fractional paper currency now issued by municipalities in Germany.

Chapter V is correctly entitled: "Who Was Who in Finance." In some detail it points out the predecessors of New York's millionaires, such as the wealthy men of the Dutch period, the capitalists in the English and the rich men in 1822.

To supplement the biography of wealthy citizens, the book contains the reprint:

Wealth And Biography of the WEALTHY CITIZENS of New York City, Comprising An Alphabetical Arrangement Of Persons Estimated To Be Worth $100,000 And Upwards. With The Sums Appended to Each Name Being Useful To Banks, Merchants, and Others.

published by *The New York Sun* in 1845.

Other chapters deal with such subjects as: the status of the 1825 bankrupt; the panic of 1836; the bank failures of 1840–42; the coming of the clearing house; the financial crisis of 1857; the orgy of high prices; the growth of the Stock Exchange; the financial situation in the 70's; the price of gold in 1878; the abuses of the check system; the gold reserve of 1892; the panic of 1893; the rise of great trust companies; the period of great consolidations; and the era under the federal reserve.

As a sort of appendix, the author concludes with the plan of Wall Street in 1822 and 1922.

In bank language, I "endorse" the book not only as interesting but as of real value to the banker and to the citizens of New York City.

In this period of financial and economic change which we have been through, it is of comfort and advantage to read of the financial crises the country has experienced this long period, and the wonderful recovery which has taken place in our economic resources. Picturing, as "A Century of Banking in New York" does, the marvelous growth of the City of New York fills one with pride in this city which has become the foremost in the world.

THE ADVERTISING YEAR BOOK

Edited by Noble T. Praigg. ix, 289 pp. Doubleday, Page and Company

Reviewed by H. M. Esty*

This book which comprises a digest of the more important papers and addresses presented before the annual convention of The Associated Advertising Clubs of the World, contains a fund of valuable information for those interested in sales and advertising. It is seldom such excellent articles by so many noted men have been brought together and bound under one cover. Herbert S. Houston, Chairman of The Book Publishing Committee of The Associated Advertising Clubs of the World, has contributed an introduction.

To indicate the nature of the contents I may call attention to some of the more important chapters. In the chapter on "Advertising in Its General Aspects," one finds contributions by Harry R. Wellman, Professor of Marketing at Dartmouth College; George W. Hopkins, General Sales Manager, Columbia Graphophone Company; and Byron A. Bolt, Sales Manager, R. R. Donnelley and Sons Company. Contributors to the chapter, "Advertising Agencies and Their Functions," include such advertising agents as: Charles W. Hoyt, Roy S. Durstine, Norman Lewis, Callin Armstrong, and St. Elmo Massengale.

To take up the numerous contributors chapter by chapter after this fashion would use too much space. Other important chapters which follow are:

Advertising Banks and Bonds
Advertising by Mail
Advertising and the Printer
Advertising and Retailing

*Advertising Manager of The Larkin Company, Buffalo, New York.

Advertising in the Newspapers
Advertising Exhibits
Advertising and Trade
Advertising Through Posters
Advertising on the Screen

The following quotation from the introduction will indicate the reason why the book has been published:

> The hope will accompany this first "Year Book" that the great company of men and women, who are endeavoring to perfect advertising as an efficient and economical force in distribution, will find these pages of definite service and value. If that hope is realized it will have a stimulating effect on the character of the next convention; and presently a beneficent circle of cause and effect will be formed, the convention helping "The Advertising Year Book" and "The Advertising Year Book" helping the convention, and that is what ought to develop in a great organization of service that goes forward in the name of "Truth."

"The Advertising Year Book," is the kind that any executive can study from time to time with profit.

HANDBOOK FOR BUSINESS LETTER WRITERS

By Louise E. Bonney and Carolyn Percy Cole; Introduction by Edward A. Filene, President of William Filene's Sons Company, Boston, Mass. iii, 98 pp. Harcourt, Brace and Company

Reviewed by R. M. Barnett *

Good books on the art of writing business letters are numerous, yet few if any of these have been written from the viewpoint of the person who is most anxious to learn to write such letters—the stenographer. Most books are written for the executive. It is rare indeed to find a book which tells the stenographer the little things that she needs to know in her everyday work of writing business letters. There are many books which tell her how her boss should dictate his letters—and how she should dictate letters when she becomes an executive. But the books which tell the stenographer how to do her daily tasks in such a way that her promotion to executive work may be expedited are all too few.

In this compact little book, replete with answers to hundreds of perplexing and puzzling issues that confront the stenographer, the authors have admirably met such a need. There are helpful bits of advice in it for the young person applying for her first position—there are still more helpful and needed bits of information that assist her in holding this position after she gets it—in gaining promotion to a higher and more responsible place.

* Advertising Department, R. H. Macy and Company, Inc., New York City.

Today, more than ever before, perhaps, the letter is being used in business—as a salesman, as an adjuster, as a good publicity agent. And so it is increasingly important that this representative of your house should make a positive impression—an impression of solid worth, of pleasant associations—in short the impression of a friend.

To write this sort of letter requires more than a knowledge of English grammar and a good flow of words. The best of phraseology is wasted if the letter makes a poor appearance on the page. And, conversely, the best layout is useless if the wording is poor.

The task of the stenographer is much easier if the person dictating the letter knows and appreciates just what that task is and what it involves. So the executive may well read this book—and then give it to his stenographer for constant reference—to the end that his letter may be really worth while—in other words, the sort of "letter that makes a friend."

> The letter that makes a friend is attractive in appearance, clean, framed in a white margin, consistently planned. It is simple and clear in its meaning, just as the speech of a friend is simple and easy to understand, with no hidden thoughts, no statements with double meanings, no formal phrases that repel.

In this concise definition are outlined both the responsibility of the executive and the duty of the stenographer.

Following this introduction the form of the letter is discussed and various examples of accepted forms are given, and the times to use each are discussed.

The body of the book is devoted to a listing of the "right" and "wrong" ways of using titles, punctuation, connectives, words often confused in daily usage, such as "further" and "farther," prepositions, verbs, pronouns, possessives, and a host of "little things" that make or mar the business letter. A rather complete list of acceptable abbreviations of business expressions is given.

No attempt is made to teach the stenographer how to spell, but the authors have summed up the whole of this matter:

> One prominent executive embodied this attitude when he said, "We do not expect our stenographers to be perfect spellers. We *do* expect them to consult the dictionary."

The troublesome question of syllabification is dealt with and a number of examples are given. For example, should one, at the end of a line, write sal-utary, or salu-tary—may one write need-ed; if so, why may one not write play-ed? These questions are answered and good concise reasons are given for the correct usage.

A list of the various sorts of letters used in business is given with samples of each kind and a short discussion of the essentials:

> The Letter of Inquiry, Answer to an Inquiry or Request, Order Letters, Acknowledgment of Order, Notice of Shipment, Letter of Claim, Letter of Adjustment, Collection Letter, The Application Letter, Sales Letters, and Telegrams.

To assist those who may desire to make further studies along the lines of business letter writing a bibliography of standard books on this subject is given, and a list of publications which have articles from time to time on the business letter is added. A very complete index is given to assist in looking up mooted points.

Here, then, is a book which the executive may read with profit and whose value to the young person in business is well expressed in a few sentences of the introduction, by Edward A. Filene:

> This book will teach young people to handle intelligently those essential tools of business, words, and sentences. Therefore, I am interested in it and recommend it.

AN INTRODUCTION TO THE STUDY OF LABOR RELATIONS

By George J. Watkins. xv, 644 pages. Thomas Y. Crowell and Company

Reviewed by Joseph W. Roe*

This is primarily and frankly a textbook, and it is a good one. It is intended, as its title suggests, to serve as an introduction to the study of Industrial Relations, to acquaint the student and general reader with facts and general conditions which influence these relations, and to describe and evaluate the remedies which have been applied or proposed.

It is divided into three parts; the first covering the nature and development of labor problems in England and this country. The second part takes up the analysis of these problems, dealing with the standard of living, wages, hours of labor, child labor, women in industry, unemployment, labor turnover, immigration, and industrial unrest. Part three deals with the agencies and methods of readjustment, and covers the history, organization, and practices of both labor organizations and employers' associations, the adjustment of industrial disputes, industrial councils, profit-sharing, industrial education, co-operation, socialism, labor legislation, etc.

The historical chapters are valuable, as they give a perspective to present-day problems which are deeply rooted in the past and cannot be considered intelligently

* President, Society of Industrial Engineers.

without a knowledge of what has led up to them. The author shows a good sense of proportion and holds no brief for either employers or wage-earners. In treating labor problems, he has the advantage of something more than an academic point of view, since he has had first-hand contact with industrial conditions as a wage-earner in mines and in machine industries. At the end of each chapter is a list of selected references which enable the reader to pursue the subject further if desired; and taken together, they form an excellent bibliography in this field.

The book has some 650 pages. Nowhere can it be called light or popular. On the other hand, it is nowhere heavy or difficult to read, a very welcome merit in books on sociology and economics. In general its style might be termed "substantial," as in fact it must be to treat adequately a subject so solid and so complex. Nowhere, however, should it scare anybody who is seeking light in this field. The statistics throughout the book are up to date and used with discrimination.

Sociology has been called "the dismal science." The ugly problems are stated frankly, but gloom is not a characteristic of the book. Professor Watkins is too well informed for any "Pollyanna" optimism. His general attitude is that the causes of unrest lie deep in the organization and operation of industry, that strikes and lock-outs are symptoms of unremedied, but remediable, maladjustments in the industrial system, that improvement can come only through a fuller and more sympathetic appreciation of the human forces in industry, and the recognition and the amelioration of those conditions which balk fundamental instincts and breed strife. The recognition of these conditions and the development of their cures, is the first duty of modern, constructive citizenship.

He states the various theories of socialism, fairly and completely, but says, "there is very little reason to believe that socialism, in any form, gives much promise of success." For several reasons he believes that co-operative enterprise deserves more consideration than it has received in this country; and his chapter on co-operation is one of the most interesting and informing in the whole book. With the exception of co-operation in the field of distribution, particularly of agricultural products, the Americans have little idea of how far, and how rapidly, co-operation has developed elsewhere. From the small beginnings of the Rochdale experiment in 1844, the movement has grown in England to astounding proportions. In 1920 the general Co-operative Union of England had 4,600,000 members, representing nearly one-half the population of the United Kingdom, a capital of $550,000,000, and a turnover of more than $2,000,000,000 a year. The development in the United States has been slow, with no suggestion of such proportions. Professor Watkins gives as reasons for this, the economic conditions of a relatively new country, the spirit of individualism, and the strong competition of chain stores, department stores and mail-order houses.

The book is worth while; and is recommended, not only to teachers and students, but to social workers, executives, and others who want a general and well-proportioned survey of this subject.

A SHELF OF BUSINESS BOOKS

Budget Making. By Arthur Eugene Buck, 234 pp. D. Appleton and Company.

Municipal executives who are interested not so much in the philosophy in the budget as in obtaining model forms and in practical systems for preparing budgets will find this book a valuable addition to the literature of the subject. It has a general interest for all executives who are taxpayers. The technique of budget administration begins at Chapter III and ends at Chapter X· Immediately following the text are several appendices. These contain valuable documentary material from the legal point of view. Though the volume was prepared primarily for those connected with administration of state and city budgets, it has some value for accountants whose work has to do with industrial budgets. It should be in the library of every school of business administration.

The A B C's of Business. By Henry S. McKee, vi, 135 pp. Macmillan Company.

The old copybook of the district school days contains a motto "that good goods often come done up in small packages." Such a saying applies to this modest volume by Mr. McKee. The executive who slips this book into his grip for perusal on the train will make no mistake. It is a safe and sane presentation of business economics. While certain chapters deal with complicated business problems the language and mode of presentation is extremely simple and clear. Much has been written about business cycles. The chapter on "Good and Bad Times," contains the meat of the whole matter, and of the present volume —a dish without any stuffing.

Why Manufacturers Lose Money. By Robert Grimshaw. 176 pp. D. Van Nostrand Company.

Executives who are interested in how money may be lost in manufacturing will find helpful suggestions in this book. In spite of this somewhat satirical remark, the book is not without some merit. Here and there in the classification of losses are tips which may suggest sources not yet investigated by the manufacturer.

First Principles of Advertising. By Wilbur D. Nesbit. 111 pp. The Gregg Publishing Company.

The executive in charge of advertising will find little that is new in this volume. It is, however, a good one to give to beginners on the staff. For executives who want to know the fundamentals of advertising, this book—to use an overworked phrase—fills a long-felt want. Its author practices what he preaches and through a breezy conversational style and through the use of advertising vernacular he has compiled a volume that the reader will find it hard to put on the shelf until the last chapter has been read. By way of good measure the author has thrown in numerous constructive exercises. No satire is intended with the remark that one of the best things about this volume for the busy man is that it consists of only 111 pages.

The Business of Writing. By Robert Cortes Holliday and Alexander Van Rensselaer. xx, 297 pp. George H. Doran and Company.

Of the making of business books there seems to be no end—with apologies to an old saying. Executives who are preparing manuscripts for the printer either as books or as special articles will find helpful suggestions in this volume. Its bibliography is its weakest part. In view of the positions held by the authors in the literary game, it is surprising that they should have overlooked some of the best books, especially in the field of advertising and journalism. The section listing books on the "short story," however, is an exception, as it is adequate and satisfactory.

Progressive Co-partnership. By Ernest Walls, Chairman of Christopher Thomas and Bros., Ltd., and a Director of Lever Bros., Ltd. x, 285 pp. Nisbet and Company, Ltd.

Many executives frequently confuse profit-sharing with co-partnership. Details in distinction are clearly indicated in this volume. It will appeal to the American manufacturer because it gives the results of experiments in co-partnership in Great Britain. Its author warns the reader that the contents of his volume do not involve any of the companies with which he is connected, but adds that his belief in co-partnership as a practical plan suited for present needs is based on personal experiences of actual co-partnership for a number of years.

Possibly the most practical part of the book is that dealing with model co-partnerships with a description of the systems followed in several individual plants. The text devoted to American co-partnership is extremely jejune. Yet the volume concludes with Henry Ford's dictum, which is neither dry nor uninteresting, "The employer must meet the employee half-way, and always be there a little ahead of time."

Mental Causes of Accidents. By Boyd Fisher, xii, 315 pp. Houghton Mifflin Company.

Because the author of this volume has had wide experience in industrial management, his views are worth the thoughtful consideration of executives interested in

production. Briefly the book analyzes the psychological side of industrial accidents—something that has been overlooked in the past. Chapters which deserve careful reading are "The Misguided Mind," "The Stubborn Mind," "The Troubled Mind," and "The Tired Mind." It is well known among executives that routine monotony produces frequently a blockade of energy, and that fatigue is often the cause of industrial accidents. The concluding chapter which is devoted to the self-guided approach to psychology is a compilation from the works of distinguished psychologists. These citations give the fundamentals of psychology to any executive interested in industrial management. On the whole the book should help solve some of the problems connected with the causes and the prevention of industrial accidents and should, therefore, be read by every employer of labor. In a way it is a companion volume to "Industrial Accident Prevention," by David S. Beyer.

REVIEWS OF BUSINESS PAMPHLETS

Factories for the Future. Prepared by J. E. Sirrine and Company, Greenville, South Carolina.

The rather obvious nature of the suggestions carried in this pamphlet detracts from the effectiveness of the material. Its purpose is to point out the different factors which should enter into the consideration of enlarging factory quarters for the purpose of increased production. Three alternatives are mentioned: The construction of additions to the original plant; the building of an entirely new plant upon the site of the old one; and moving the site to a different location, there to build a new plant. With these three possibilities in mind, the author urges the executive or directorate to call in their different superintendents and assistants to discuss the necessary steps contingent upon larger quarters, and finally to consult with an engineer. Since it is rather obvious that an executive would naturally be constrained by plain common-sense to consider carefully the advice of his subordinates and of an engineering service before expending the thousands of dollars requisite for the construction of additions, it seems that there is little excuse for the pamphlet, other than the illustrations which furnish a good idea of factory construction in the United States.

The inflated population of the manufacturing cities during and immediately following the war would have made this discussion of greater importance three or four years ago, but it still bears a strong interest for the executive who has not as yet understood the aspects of the newer economics which point out that it is to the manufacturer's interest to see that his employees have proper housing conditions.

The pamphlet discusses the benefits which accrue to the employer through providing proper living quarters for the men who are working for him. The material is general, since, as is suggested, it is impossible to lay down specific rules for conditions which differ with each individual case. The text is illustrated profusely with photographs of ideal living conditions realized in different factory communities through the efforts of employers.

Cost Accounting in the Manufacture of Iron and Steel Sheets. By Keith B. Woods. The National Association of Cost Accountants, 130 West 42 Street, New York City.

This publication is one of the most specific that the National Association of Cost Accountants has yet issued.

The author makes the point that before expenditures can be controlled it is necessary to prepare a card of accounts in complete detail in natural control units. These units are further subdivided in the detail necessary to control major operations within a department and considering also the fact that costs are wanted on various pieces of equipment over extended periods. There is a section on mechanical work orders. The accounts kept in this connection are mentioned which, according to the author, should be closed out monthly, never carrying any balances into the next month. The order in which these accounts are closed out is mentioned.

A summarized monthly report of mechanical expenditures covering all of these accounts should be made out.

All card of account items should be coded by numbers and a sorting and tabulating system used for the collection of expenses.

Distribution classes are the groups into which the expenses of each department are sorted to be distributed to accounts or product participating. Examples are: charge tonnage; production tonnage; number of batches or heats, etc.; actual equipment hours; standard equipment hours, and square feet, etc.

Each department carries its own distribution classes. In all distributions an attempt is made to have them *natural* or according to the way they are used, for instance, buildings on a square foot basis, electric power on a kilowatt hour basis, oil spread on the surface of a sheet on a square foot basis, etc. Unless this general plan is followed the costs are hardly worth the paper on which they are written. While there is some opposition to this plan, nevertheless, facts are facts—and costs *should* be facts. Any arbitrary way of distribution other than the natural way is *not* a fact. It is admitted, however, that where items are small and unimportant too much continuous time and expense should not be wasted going into ultra-refinements. All cost keeping should be based on common sense. We must not fool ourselves in our anxiety to get extreme simplicity.

The author says that labor is collected in one of four ways:

1. Departmental Daily Force Reports
2. Job Service Cards
3. Assignment Job Service Cards
4. Gang Job Service Cards

These different methods are explained.

Departmental cost sheets are made out monthly from all the expense tabulating cards originally prepared for each and every department according to the Card of Account Department number, two copies being ultimately typed—one for the general manager and the other for the treasurer or works manager. The latter copy eventually reaches the superintendent or head of the department interested.

The various operations in a plant making iron and steel sheets are described, some of which are: Hot rolling into sheets; cold rolling; annealing; galvanizing; bar pickling; finish cold rolling; roller level; stretcher level; inspection; oiling and resquaring. The accounting for sheet costs is explained in considerable detail. The method of handling finished stock cost cards is described.

The last section of the pamphlet deals with special features of accounting in a plant manufacturing iron and steel sheets. Some of these special features are—scrap produced, seconds, spelter dross, and idle time expense.

ANALYSIS OF THE BALANCE SHEET

Editor Administration:

If the correspondent inquiring about the analysis of balance sheets, whose letter is published on page 506 of the October *Administration*, will refer to *The Annalist* of May 2, 1921, page 496, and *The Banker's Credit Manual*, Alexander Wall, Bobbs-Merrill, he will find articles of interest to him.

Yours truly,

Arthur J. Linn

In addition to this comes the following helpful letter giving standards by which to measure the various results shown by the balance sheet and the profit and loss statement. Some of these figures will, of course, be varied for other businesses and may perhaps be changed to meet the ideas of other individuals. In such cases, however, they give an excellent basis for working out the required standards.

Editor Administration:

We have read with interest the letter from your correspondent relative to the determination of working capital, the analysis of the balance sheet and financial report and the relation of each to the other.

This has been a matter of great interest to us, and we have worked out formulae by which we analyze the various reports that we receive, especially the ones that we are vitally interested in. In order that others may benefit from our experience, we are passing on our information, some of which is borrowed and some of which is original, and which may serve some purpose. This is given in the table sent you herewith showing the different comparisons and the range that we have arrived at within which the analysis should come.

We are looking for light on this subject, and would appreciate if you will publish more along this line.

Yours very truly,

W. W. Edge

PATENT VALUATIONS AS AFFECTED BY FEDERAL TAXATION

The following letters refer to the article on "Patent Valuations" which appeared in the August number of *Administration:*

ANALYSIS OF COMPANY STATEMENTS

	Ratio of Current Assets to Current Liabilities	Relation of Total Assets to Total Liabilities	Relation Cash Resources to Current Liabilities	Relation Cash Resources to Yearly Gross Sales
(Standard)	2 for 1 and better	3 for 1 and better	15 to 25 per cent	3 to 6 per cent
	Relation of Current Liabilities to Annual Sales	Relation of Working Capital to Total Capital	Relation of Working Capital to Monthly Sales	Relation of Inventory to Monthly Sales
"	20 to 30 per cent	6 to 190 per cent	100 to 500 per cent	100 to 600 per cent
	Proportion of Capital in Fixed Assets	Relation of Capital to Investments	Relation Net Profits to Capital Stock	Relation Gross Profits to Sales
"	30 to 90 per cent	2 to 10 per cent	30 to 50 per cent	15 to 30 per cent
	....	Relation Net Profits to Sales	Percentage Depreciation to Plant Account	Relation of Surplus to Capital Stock
"	....	10 to 15 per cent	10 to 30 per cent or more	100 per cent

Editor Administration:

You may be interested in a letter just received from John A. Conlin, author of "Income Tax Procedure 1917," University Lecturer, and formerly Deputy Internal Revenue Collector, Newark, New Jersey.

I desire to state that your article on patent valuations (August *Administration*) was indeed very interesting. There is only one criticism that I have, and that is you have overlooked the necessity of telling the reader what he should do when the government attempts to use other methods for patent values than that referred to by you.

The writer considered this point when writing the article and omitted it purposely in order that the negative idea of the government differing with the methods suggested in the article might not weaken their force. Moreover, it would require another article to do justice to the subject of telling the reader what he should do when the government disagrees with him on patent values. Such an article would have to do with the filing of claims for refund, credit, or abatement, arrangement for hearings and other allied matters such as statute of limitations (for the period within which claims may be filed) and powers of attorney (where someone represents the taxpayer).

Yours very truly,
Ralph H. Allen

The second letter was sent to Mr. Allen by an attorney of Boston, Massachusetts, specializing in patent matters.

Dear Sir:

I have read with very great interest your article on "Patent Valuations as Affected by Federal Taxation" in the August number of *Administration* which you so kindly sent me. It seems to me to be an excellent presentation of a difficult subject which is given strangely little attention in income tax literature.

There are one or two suggestions which I might make on the general subject which grow out of cases in my practice.

For instance you will be interested in knowing that in one very important case I persuaded the department to capitalize the earnings by using an 8 per cent return on the tangibles and 10 per cent on the remaining income for patents and good-will. In another case I persuaded them not only to use these rates but in addition to deduct first of all from income a 5 per cent return on certain state and municipal bonds held by the company throughout the period whose interest rate averaged about 5 per cent.

I note that on page 190 you speak of patents being deemed to be tangible property under the 1917 law. I believe the Department classes them as intangibles but as not being the kind of intangibles which were subject to the 20 per cent limitation. The result is of course the same.

It has occurred to me that possibly what are called Hoskold's tables in the mining industry might be applied to advantage in determining present value of patents whose income is received in the form of royalties. If you are not familiar with these tables I may say that based upon various interest rates they purport to give the present value of $1 which is assumed to be returned in equal instalments over a period of years with each instalment reinvested as received. Thus, for instance, if the Natural Resource Section decides that, say 8 per cent interest is a fair rate of return in a particular mining industry, and the mine is expected to be exhausted in twenty years, they will, assuming a 4 per cent return on the income received in each year and presumably reinvested, use the 8 per cent column of Hoskold's table and a twenty-year figure to determine the present value of each $1 which will be received over the twenty-year period. Would not such a computation be possible in the case of patent royalties, the average of which can be fairly said to represent the expectancy for the future to ascertain the present value of these royalties which would be, of course, the present value of the patents. The element of 4 per cent assumed to be received by reinvestment of the funds would, of course, operate to increase the present value of the patents and would therefore be desirable. The result might be a higher value than would be obtained by any other method.

Very truly yours,
Henry Herrick Bond

A MESSAGE TO THE MAILING DEPARTMENT

The following comes from Mr. Blackman, whose article on "Co-operation With the Post-Office" appears elsewhere in this number of *Administration:*

Editor Administration:

The office employee usually comes from the business college or the public school and neither of these gives any thorough or reliable postal instruction. The worker is willing and anxious to do the right thing but he simply does not know. The business manager is too busy with more important things to keep constantly watching and instructing his force. He wants the perfect service that well-informed office workers can give him but other matters drive him so hard that he has not the time for the picayune details of mail preparation.

Under such circumstances, it seems to me that a reliable and readable book of postal instruction might be cordially welcomed by business men. They could put that book into the hands of their office force with complete faith that it would guide their help against all the costly dangers of the service. Then, they could go on about their more important work without the constant fear that some mail blunder would bring them all kinds of annoyance and worry and the disappointment of ruined plans and shattered hopes.

Such a book could not hope to pay its author as much money as fiction, yet if there is an honest demand for it, I would gladly take the time to prepare it.

If I could get such a book into any considerable number of business offices over the land, it would, I think, render a greater service to the business world and to the Post-Office Department than all of my 6,000 eight-hour days combined.

Is such a book really wanted?

Yours very truly,

H. A. Blackman

Will our readers help Mr. Blackman by expressing an opinion as to the need for such a book? Letters may be sent in care of *Administration.*

DIVIDENDS IN SECURITIES

The letter printed below comments on the article "Dividends in Securities" which appeared in the October number of *Administration.* Professor Paton's reply to its criticisms follows the present letter.

Editor Administration:

It is somewhat difficult to agree with Mr. Paton's contention that the character of dividends paid by a company is unchanged and identical, whether such dividends be in certificates of stock representing ownership of the company or whether they be bonds, notes, scrip, etc., representing liabilities of the company; and further that all these kind of dividends are different from another class consisting of payment by cash or other property of the distributing company.

The differentiation set forth is based upon the effect of the dividend upon the balance sheet; the latter class just mentioned or "true dividends" reduces both sides of the balance sheet, the assets and the surplus, while the other class merely causes an interchange in accounts on the liability side without affecting the total of that side. This is unquestionably a false basis of classification, for the stand is taken that there is no line of demarcation between the capitalization of surplus for permanent use, and the reduction of surplus and an offsetting increase in liabilities, when such liabilities are distributed to the stockholders as a dividend.

The true criterion of the character of the dividends is the effect upon the net worth of the business. When thus considered, it is seen that all dividends are "true dividends" except those which do not diminish the net worth, and the only dividends which fit this last description are stock dividends. In other words, stock dividends are in a class separate and distinct from all others, as set forth in the decision handed down by the Supreme Court. The decrease of assets by the payment of a dividend in cash or other property has no different effect than an increase in liabilities resulting from the payment of a dividend in obligations of the company. Either way causes a decrease in the net worth. Of course, the method chosen by the directors will undoubtedly have an effect on the financial

position or degree of solvency of the company, but that is a matter of judgment for which they will be held responsible.

Let us consider a case: Suppose a corporation declares a dividend and pays it in its own 10-year 5 per cent bonds. To what extent is the stockholder liable for income taxes on such a dividend? His income will be the market or cash value of the bonds. (Reg. 62 Art. 1547). Now, if the bonds have no market value nor any ascertainable cash value, the recipient is not liable for any tax until such value can be determined. Under such circumstances, if no value is established until redemption, the result is the same as under the assumption of Mr. Paton. But, if such bonds have a market or cash value, it is evident that a true dividend has been received and the result will be entirely different. For the corporation could have sold the bonds at such market value and then paid the stockholders a cash dividend. The payment of the dividend directly with the bonds is the result of choice of methods, and not a difference in kind of dividend.

Mr. Paton has failed properly to emphasize that, while stock dividends do not disturb the net worth of the business and hence the equity of the stockholders, the payment of a dividend with liabilities instantly and permanently decreases the net worth, and the effect is consequently no different than if the assets had been decreased by the payment of cash or other property belonging to the company.

There are some minor points upon which issue can be taken. For instance, it is set forth that a stock dividend tends to obscure the original investment and accumulated profits. It is immaterial that the balance sheet should show the original investment, few do as it is. As for the accumulated profits, there is probably no surplus on any balance sheet that is even an indicator of such profits; surplus on a balance sheet is useless for that purpose.

The charge is made that the "questionable" practice is indulged in of increasing the capitalization by stock dividends so that the same cash distribution may be retained although being made at a much lower rate. It is intimated that this is some sort of evasion or deceit. If a corporation has been paying dividends of 10 per cent practically from the beginning, and out of accumulated profits declares a dividend in stock of 100 per cent and cuts the rate of dividend to 5 per cent, the cash distribution has not been affected, but apparently the company pays dividends at a low rate. Inasmuch as the company has invested twice the original amount, the stockholders are in reality receiving no greater dividend although their equity is once again as great as originally. However, even if the actual cash distribution had been increased by declaring dividends of 8 per cent on all the stock including the new, it is doubtful if such a step should be called into question on ethical grounds. If the efforts of demagoguery can be nullified by such means, they are to be condoned rather than otherwise, nay, even urged, for no stone is left unturned by that certain class to twist the best financial practices into the appearance of cunning, deceit, and fraud. Fair means are never wrong, especially when used to defeat foul practices.

Very truly yours,

W. F. Meyer

November 13, 1922.

Editor Administration:

I have read Mr. Meyer's letter relative to my article, "Dividends in Securities," appearing in the October *Administration*, and a few comments seem to be in order.

First, I did not state that a bond dividend is "identical" with a stock dividend. Naturally it would be "difficult to agree" with any such contention. Each type, of course, has its peculiarities. In the case of the bond dividend the recipient investor is left with an undisturbed total interest, but the legal character of a part of his equity is nevertheless changed—as was pointed out in the article in question.

Second, Mr. Meyer states that to draw a contrast between dividends which result in an actual apportionment of corporate assets and those which do not is unsound. He does not indicate why the distinction is improper. As a matter of fact this line of cleavage is fundamental in law, is vital from an accounting point of view, and is of the utmost significance with respect to practical effect upon both company and recipient investor. Surely the transfer of corporate

assets from company to individual shareholder is a matter of importance, and, accordingly, the difference between a transaction in which this occurs and one in which it does not is a real one.

Third, the unsupported statement that the true criterion of the character of a dividend is its effect upon "net worth" cannot be taken very seriously. Since when has corporate "net worth" become an element having definite legal content and significance? This conception, it must be remembered, is largely one of convenience, developed by the accountant primarily in the unincorporated field, and having relatively slight validity and importance in the case of the corporation.

Fourth, it should be reiterated that the writer recognizes a difference between dividends paid in contractual, terminable securities and dividends paid in stock (although, it may be noted, even a dividend stock so-called, may be contractual and terminable). The difference, however, is not fundamental for purposes of income determination. In *all* such cases the recipient must, by his own action, liquidate a part of his holdings in order to realize. The effect of such liquidation upon his pro rata control of the company depends, of course, as was explicitly pointed out in my article, upon the character of the security involved.

Mr. Meyer argues that since a company may issue bonds to secure funds to pay a cash dividend there is therefore no essential difference between a cash dividend and a bond dividend. Such argument is quite unreasonable. A company might secure the funds with which to pay a dividend by means of a new stock issue. Would this mean that there were no difference between a cash dividend and a stock dividend? This point is surely a boomerang.

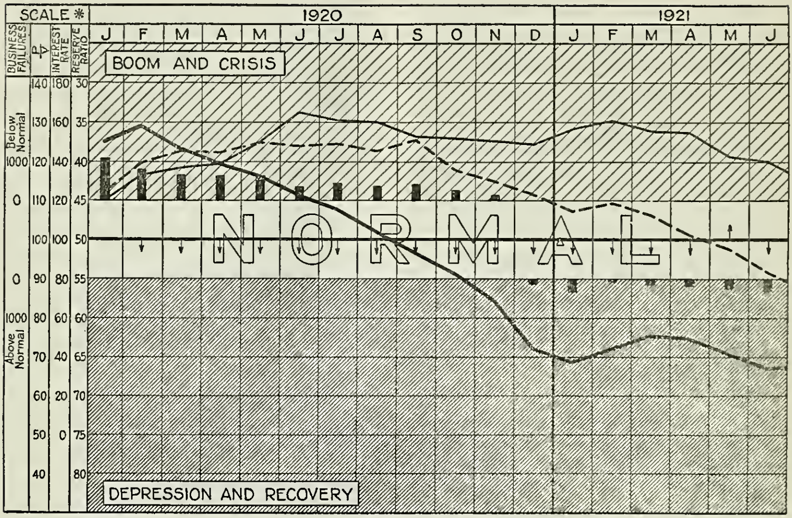
In general it is doubtless not expedient to borrow to pay cash dividends; and if such action is taken it is scarcely possible that the stockholders will take the bonds or other obligation pro rata. Even, however, in the event that the shareholders subscribed for the new security pro rata, and thus furnished the funds to pay their own dividends —a very silly procedure indeed—it could still be urged that there is a fundamental legal distinction between this case and one in which a bond dividend is issued. In one case assets to which the corporation has title are distributed to the shareholders; in the other case there is no transfer of corporate property whatever. To argue that there is no difference between the two cases is equivalent to urging that there is no such thing as the corporate entity, that the stockholders are in effect partners, and so on.

Fifth, the statement that the typical balance sheet does not show initial investment and that the surplus account ordinarily is "useless" as an indication of accumulated earnings, even if true, does not demonstrate that initial investment on the one hand and undivided profits on the other are not facts of importance; nor does this statement demonstrate the impropriety of suggesting improvements in balance sheet practice.

Finally, the writer sympathizes with the suggestion that the corporation, faced with the possibility of attacks by radicals often based on the wildest assumptions and misapprehensions, should not be too severely criticized for its attempts to protect itself through accounting practices designed to obscure surplus. This is no reason, however, for our failure to understand some of these transactions.

Yours very truly,

W. A. Paton



**Note on Scale:* Failures—Number above or below normal; $\frac{P}{V}$ Line—Index number, 100 equals 1912 rate;

THE BUSINESS TREND—A BAROM

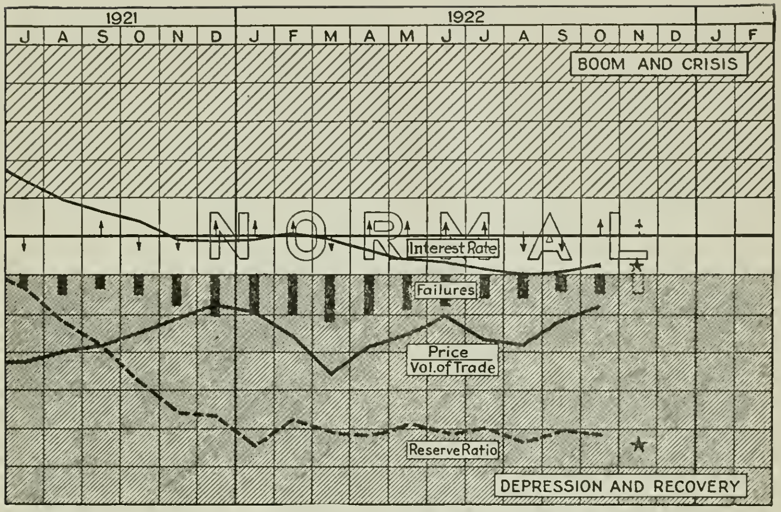
Prepared by Lewis H. Haney,

EXPLANATION OF BAROMETER.—The trade barometer shown above is so constructed that when business is in the stage either of boom and expansion or is moving downward in the early stages of crisis, the curves and vertical bars are in the upper area. When the general business condition is that of depression or the beginning of recovery, the curves and bars are in the lower area.

The light line shows the course of the interest rate on prime commercial paper, with adjustment for normal seasonal variation. It is based on an index number, 100 equaling 5 per cent. The dotted line shows the federal reserve bank ratio of cash reserves to note and deposit liabilities, *the curve being inverted* so that an increase in the ratio causes a fall in the curve. The heavy line shows the relation between the price level (Bradstreet's index number of wholesale prices) and the physical volume of trade (car-loadings × tons per car). The bars projecting above or below the normal zone indicate the movement of business failures (Dun's). Bars projecting above the "normal" area, show a smaller number of failures than normal; bars projecting below show an excess of failures over normal; the absence of any bar would show that failures are normal. The arrows pointing up or down from the center line of the normal zone show by their direction the course of a special six-commodity price index. The stars indicate the probable trend of the curves during the current month; the dotted bar the probable trend of failures.

THE BUSINESS TREND IN NOVEMBER

The end of October found the more important indices of business all indicating continued improvement. The PV line which is the heart of "the business trend" showed the second successive monthly increase and the price outlook is such that further advances in this index seem probable. The general trend of the several factors in the barometer is upward. Barring unforeseeable political developments,



Interest Rate—Index number, 100 is based on 5 per cent; Reserve ratio—Actual figure, scale inverted.

ETER OF INDUSTRY AND TRADE

Director, New York University Bureau of Business Research

it may be stated with much confidence that business is nearing normal and may be expected to be sailing on a fairly even keel early in 1923.

With reference to the minor downward swing in the stock market which occurred in the latter part of October and early in November it may be said that stock prices had overdiscounted the upward trend of business and that the setback was necessary to bring security prices in line with the actual business conditions. The PV line had declined in July and August, but stock prices continued their upward course.

In view of the resumption of the upward trend of the PV line a higher general level of prices is to be forecast for the stock market, somewhat tempered by firmer money rates and less easy credit.

1. The New York University six-commodity price index moved up seven points in October and the indications are that it will at least hold this gain in November. As the commodities are chosen because they best indicate the business cycle, the trend is significant. During October small declines occurred in pig iron and copper, but these were much more than offset by large gains in wheat, cotton seed oil, sheetings, and silk.

2. The interest rate on commercial paper continues to show increased firmness and this may indicate the beginning of the upward swing in the business cycle. It is to be noted that the firmness in the rate is in spite of a decline in outstanding commercial paper, a condition which makes the significance of the increase in interest rates somewhat uncertain.

3. The number of failures in October was such that the excess over normal for that month was slightly larger than in September, being 484 for October against 466 for September. This slight setback appears to be temporary and due to continued unstable and ill-adjusted price conditions. The outlook for November is better. The October showing, while not bad enough to

suggest a general business setback, does indicate that business is still in the area of "depression and recovery."

4. The PV line moved upward again in October and will probably show a further rise in November. The active factor in the advance has been a continuation in the upward trend of price levels. Bradstreet's price index again showed an advance great enough to more than cover the large increase in physical volume of trade. This conjuncture of increasing physical volume and price is especially propitious and forecasts increased earning power in business. With increased net earnings there will of course come larger dividends or an increased number of dividend paying concerns. The investor in stocks must use care in judging when the stock market is overdiscounting the future, but he may confidently purchase many securities at the levels obtaining in the middle of November.

5. The reserve ratio, after allowing for seasonal variation, remained practically unchanged. Aside from indicating some improvement in volume of business, the curve showed no movement of significance. A broad basis for bank credit exists and awaits the demands of an expanding business. There is nothing in the credit situation to prevent further advances in prices of stocks.

Among the more general indications of the trend of business which are worthy of comment is the continued increase in the purchasing power of consumers. The New York University Bureau of Business Research, in the special trade barometer which it prepares for the wholesale grocers of New York, computes an index number of consumer's and purchasing power which has risen steadily for several months and now stands at a level higher than at any time since 1920. The chief factor in the recent improvement has been the greater regularity of employment of laborers and their increased earnings.

The political uncertainties have been somewhat aggravated as a result of the recent election, and the danger of inflationary tendencies has undoubtedly been increased. No sign has yet appeared, however, of any departure from the cautious policy which has now so long characterized retail and wholesale business.

Fuel trouble is passing. Iron production, which is often a good barometer, showed a marked increase in October. Car loadings in the latter part of October broke all records. Labor and car shortage exist; but the psychology of straining to move a big load is vastly different from that of waiting for a job.